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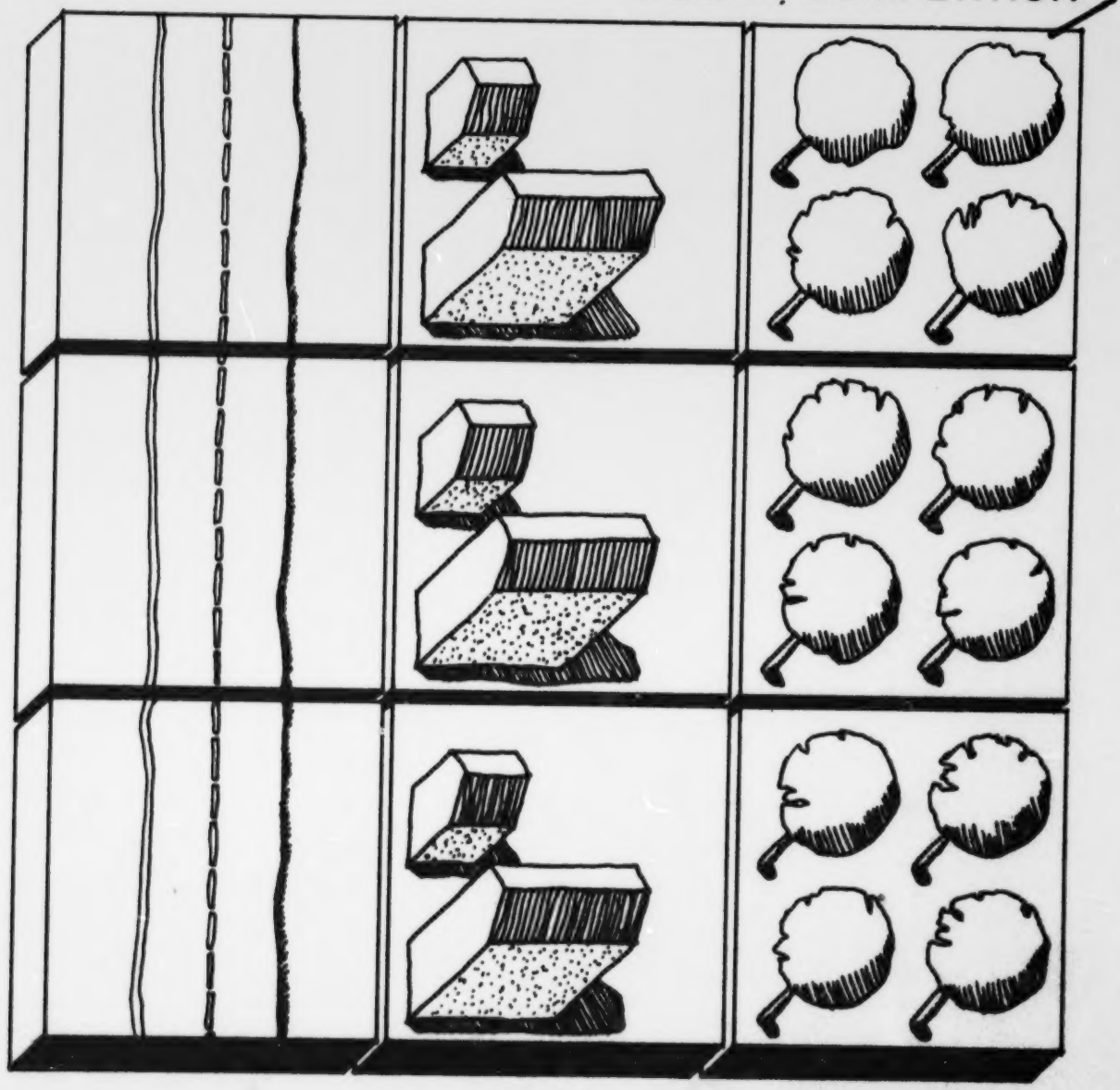
THE INNOVATIVE LAND & HOUSING DESIGN COMPETITION

APRIL 1982



Alberta
DEPARTMENT OF HOUSING

Innovative Housing Grants Program

THE INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

Sponsored by The Calgary Housing Commission
Carma Developers Ltd.

Competition Beginnings

The competition was initiated as a challenge to the architectural, planning and engineering professions to create new departures in the areas of land use planning and engineering, land development and housing design. The competition form was chosen as a means to promote design opportunities that would be readily acceptable to the public and to be the forerunner of a demonstration community project. The competition has the potential to result in recommendations for changes to planning policy, and/or building and subdivision standards.

The Site

The land is approximately 125 acres in the Edgemont area of Calgary. Existing development adjoins the site. The parcel offers the advantage of overlooking a significant coulee with the potential of natural recreation.

Carma Developers supplied the land for the competition and agreed to act as the administrator to disseminate the appropriate maps, contours and other information describing the site. General base maps are contained in the full report.

Guidelines to Participants

Each participant was asked to imagine for a few days that he/she is the owner of the land, and to ask themselves what they would like to see physically in place, what would be better than what is being done now, and contrast those things with what the future occupants might desire. Participants were asked to keep in mind two guidelines:

a) the generally understood safety and health standards, must be respected, and

b) the designs must be saleable. Reality dictates that the end product must be something that the public desires. You should try to provide the shelter occupant with the impression that he has obtained more for less cost. You must justify why you think

Copies of this report are available from Alberta Department of Housing, Innovative Housing Grants Program, 4th Floor, 10050 - 112 Street, Edmonton, Alberta T5K 2J1 (403/427-8150). Please refer to the order number shown in box at right, when requesting copies of completed reports.

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IIA
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Report: 116 Pages

people will want what you propose if it is a far step from what is currently being built. Please bear in mind that the market demand could change during the several years the land is being developed.

As described in the full report, there were eight guidelines developed and offered to the participants outlining how they were to address such issues as housing or, housing density, marketability, safety, mix of land uses, housing demand and the law.

Awards

There are four major award categories, namely:

1. the most significant proposal, combining land use and development and housing form, for a total prize amount of $7,000.00;

2. the most significant proposal with respect to land use and development for a total prize amount of $5,000.00;

3. the most significant proposal with respect to the three dimensional housing form for a total prize amount of $4,000.00;

4. for those who have chosen not to submit an extensive proposal, there will be twelve merit awards focused on a variety of topics awarded according to their practicality and ease of implementation.

The Winners

The winners of this competition are as follows:

1. Jack Long and the New Street Group, Calgary, Alberta
   First Prize: Land Use and Development
   Second Prize: Housing Form

2. IBI Group, Edmonton, Alberta
   Second Prize: Land Use and Development

3. Barry Pendergast Architect Ltd., Calgary, Alberta
   First Prize: Housing Form

4. Tritek Engineering Ltd., Calgary, Alberta
   First Prize: Technical

5. Stanley Associates Engineering Second Prize: Technical

6. Merit Awards:

a) John Bousfield Associates Ltd./D.R. Misbur, Architect - Toronto, Ontario

b) Hok Lin Lung - Kingston, Ontario

c) The Sturgess Partnership - Calgary, Alberta

7. Student Awards:

a) John Alley, University of Calgary
b) John Asimakos, Nova Scotia College of Art & Design
c) Beth MacDonald, Nova Scotia College of Art & Design
d) Janice Snair, Nova Scotia College of Art & Design

Illustrative summaries of each of the winning projects are included in the full report.

THE INNOVATIVE LAND & HOUSING DESIGN COMPETITION

sponsored by The Calgary Housing Commission
Carma Developers Ltd

April 1982.

POST COMPETITION REPORT

WINNING SUBMISSIONS

CATALOGUE OF SUBMISSION IDEAS

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THE CITY OF CALGARY

ALDERMAN JIM BELL

As Chairman of the City of Calgary Housing Commission, it is with a great deal of pleasure that I present you with a copy of the report on the Innovative Land and Housing Design Competition.

In 1982, the Housing Commission challenged the housing and land development industries to put forward innovative ideas on improving our living accommodation and its accoutrements and hopefully decrease the cost of that accommodation.

We have been overwhelmed by the response received from the industry and its associates from across the nation. This is obviously an area of concern and interest to a great many people.

We hope that the ideas contained in the report will be utilized in the near future.

Jim Bell

ALDERMAN JIM BELL, Chairman
Calgary Housing Commission

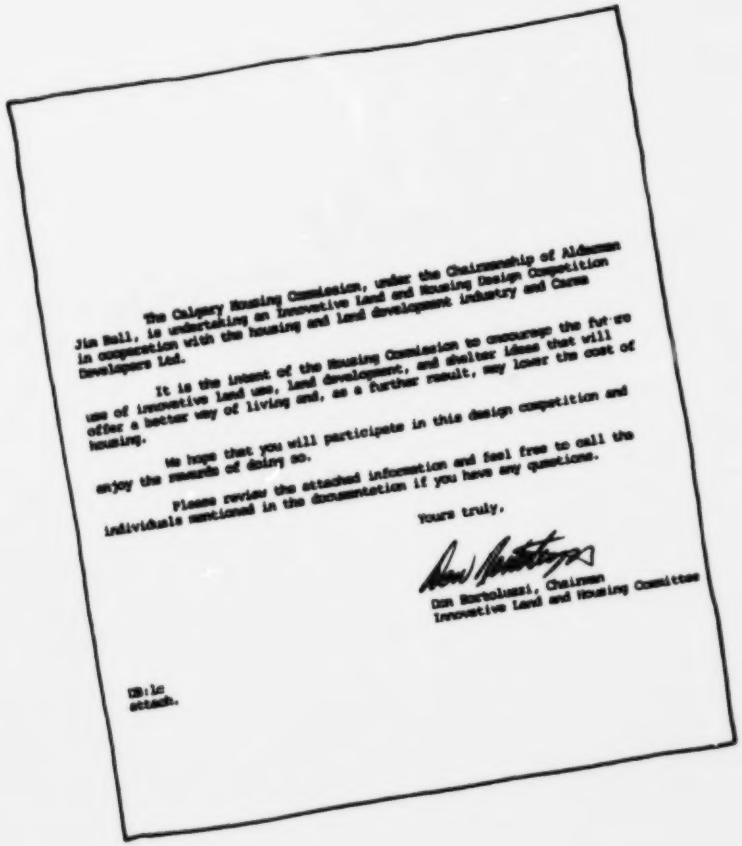
JBshz

P.O. BOX 2100 CALGARY, ALBERTA T2P 2M5 • BUS. 268-2430 • RES. 252-9711

COMPETITION BEGINNINGS

The competition was a challenge to the architectural and planning professions to create new departures in the development industry. It was sponsored by The Calgary Housing Commission, under the Chairmanship of Alderman Jim Bell. The land for the competition site was offered by Carma Developments.

The purpose of the competition was the development of innovative land use, land development, and shelter ideas to offer a better way of living and perhaps lower the cost of housing. The end product was to be readily acceptable by the public and be a demonstration community to encourage other projects. It could change existing rules and regulations, thus allowing innovative ideas to occur more readily in the future.



The Calgary Housing Commission, under the Chairmanship of Alderman Jim Bell, is undertaking an Innovative Land and Housing Design Competition in cooperation with the housing and land development industry and Carma Developers Ltd.

It is the intent of the Housing Commission to encourage the future use of innovative land use, land development, and shelter ideas that will offer a better way of living and, as a further result, may lower the cost of housing.

We hope that you will participate in this design competition and enjoy the rewards of doing so.

Please review the attached information and feel free to call the individuals mentioned in the documentation if you have any questions.

Yours truly,

Dan Bartoluzzi, Chairman
Innovative Land and Housing Committee

DB:lc
attach.

DONORS

City of Calgary
Carma Developers Ltd.
Province of Alberta
HUDAC – Alberta Council
HUDAC – Calgary
UDI

All contributed funds for the organization and operation of the Innovative Housing Competition. The assistance of the Canadian Institute of Planners should also be recognized: their contribution of free advertising attracted submissions from across the nation.

Along with the donors, there were important contributions made by the following in organizing, supervising and commenting on the competition:

Don Bortoluzzi – H.U.D.A.C.
Greg Brown – Stanley Associates Engineering
City of Calgary Housing Commission
Mrs. G. Dalgarno – Carma Developers Ltd.
Lee Guyn – City of Calgary
Tom Knott – Kentron Development Corporation Ltd.
Ray Ling – Bow Valley Consulting Group
Vimal Sarin – Alberta Home Mortgage Corporation
Greg Spearn – Carma Developers Ltd.
Dale Stanway – City of Calgary

Barry Pendergast, a winner in the House Form category, offered valuable comments during the production of the post-competition report.

THE COMPETITION PACKAGE RECEIVED BY ENTRANTS

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

Welcome to the Innovative Land and Housing Design Competition. We look forward to receiving from you some interesting ideas on innovation in land planning, development, and housing design.

What is Innovative Housing?

The challenge has been put to the housing industry to demonstrate innovative ideas that primarily address the "quality of life" but also consider affordability of shelter (home ownership and rental). The quality of life could be viewed as improving upon our way of living but with less than a proportionate increase in the initial and on-going cost. Affordability could address such areas as land use and other provisions of the Land Use By-law, land development engineering, and housing form and construction.

The meaning of "innovative" has very purposely been left undefined for the purposes of this design competition. We have available some ideas and concerns that may be of guidance to you but they are not by any means meant to be all encompassing nor need you utilize all of them in your thought process. We wish to encourage as many creative and practical ideas as are possible. Accordingly, we have set forth only very general and basic guidelines that should be considered.

Our end objective is to demonstrate innovative land and shelter ideas that are readily accepted by the public, to set an example of a successful project which will be followed by other communities and developers and, if necessary, change existing rules and regulations with respect to land use, land development, and housing design and construction to allow such projects to occur more readily in the future.

The Design Competition

The design competition and awards have been formulated to appeal to those who will enjoy the challenge of designing for all or a portion of the land referred to below and, as well, to those who have worthy ideas but time does not permit the undertaking of a major submission.

A. For those who choose to undertake a major submission, your submission need only address a portion of the parcel sufficient to demonstrate that your ideas are workable; provided that you address: i) the buffer adjacent to the environmental reserve, ii) the sloping lands, and iii) a buffer to adjacent development if the nature of your design necessitates this.

Each of these more detailed submissions should include the following:

(a) an outline land plan (Plan of Subdivision).

(b) a typical streetscape of the various housing forms.

(c) elevations and/or cross-sections that would show only different or unusual ideas with respect to each of the housing forms.

(d) particular treatment of the buffer to the environmental reserve land.

(e) all submissions should be in black and white on standard size, 24 x 36 inch sheets.

B. For those who choose to undertake a less detailed submission, your submission should be sufficient to adquately demonstrate your idea.

Submissions will be gratefully accepted from any interested individual, group, company, or association.

It should be emphasized that what is important is the generation of ideas for use in any community by any member of the housing industry. The specific parcel of land mentioned below is the vehicle by which your ideas can take form initially on paper and possibly later in physical form. Carma Developers Ltd., who have put forward this land to test innovative ideas, does reserve the right to use all or only some of the ideas proposed. This reservation understandably results from the fact that this is a significant venture on their part and they must be convinced of the viability of your ideas. Carma's willingness to participate, even to the point of this competition, indicates their commitment to undertaking innovation. It is up to you, and this committee, to convince Carma of the viability of your ideas.

The Land

The land is approximately 125 acres in the Edgemont area of Calgary. Existing development adjoins the site.

The parcel offers the advantage of overlooking a significant coulee with the potential of natural recreation.

A package containing the appropriate maps, contours, and other information essential to your work is available for pick up from the offices of Carma Developers Ltd., 6715 - 8 Street N.E., Calgary, Alberta, or, 5th Floor, 10009 - 108 Street, Edmonton, Alberta. Carma has agreed to act as the Administrator to disseminate information and gather the submission.

Any questions with regard to the general intent of this competition can be addressed to Don Bortoluzzi at 286-1708 or to Greg Spearn (Carma) at 275-5555.

Judging

The judging will probably be conducted by representatives of groups and professions including the Association of Professional Engineers, Canadian Institute of Planners, Association of Architects, City of Calgary Planning and Engineering Departments, Carma Developers Ltd., City of Calgary Housing Commission, and Associations related to the housing industry.

Criteria for judging will include:

- the degree to which the participant has adhered to the intent of this competition and the basic guidelines enclosed herein.
- the cost of development of the land and housing as proposed.
- the practicality, marketability, and suitability of the land plan and housing forms. While emphasis will be given to ideas that are marketable in the near future, the judges will also take into account meritous ideas that are not useable for some years to come.

Submission Deadlines

All submissions should be received in the offices of Carma Developers Ltd., 6715 - 8 Street N.E., Calgary, Alberta T2E 7H7, (275-5555), by April 30, 1982, to the Attention: Greg Spearn.

In order to initially prevent the identification of each entrant, the submission documents should be free of any name or logos. Each submission should be accompanied by a letter in a plain envelope which will identify the entrant and include in the letter on the face of the envelope a five digit number of your choosing. This same number should be used on all of your submission documents.

Awards

The award money will be disbursed as follows:

(a) the most significant proposal combining land use and development and housing form — $7,000.00.

(b) the most significant proposal with respect to land use and development — $5,000.00.

(c) the most significant proposal with respect to the three dimensional housing form — $4,000.00.

(d) for those who have chosen not to submit an extensive proposal, there will be 12 merit awards of between $300.00 and $800.00 each for the most practical and easily implemented ideas; (i) the reduce the initial cost of servicing with respect to roads, sewers, drainage control, lighting, sidewalks, etc. (there will be at least three awards under this one category); (ii) to decrease the cost of a lot by means other than a reduction in the cost of servicing; (iii) to reduce the cost of maintenance by the City; (iv) to decrease the cost or increase the efficiency of surveying; (v) to reduce the cost of providing rental accommodation or the monthly cost of renting; (vi) to reduce the cost of home construction; (vii) that address the concerns of the police with respect to security and related matters; (viii) that increase the availability of mortgage money or decrease the cost of financing; (ix) that propose the most feasible means to implement energy conservations.

At least one of these merit awards will be reserved for a proposal received from a student.

The Judging Committee will have the discretion to award one entry a multiple prize from more than one category or not make an award in any one category if the submissions do not merit an award. The winning submissions will also receive plaques in recognition of their contribution.

Carma may choose to select one or more entrants on a per diem basis to assist Carma and its consultants in finalizing a formal submission to the City of Calgary.

Guidelines to Participants

1. Each participant is asked to imagine for a few days that he (she) is the owner of the land. Accordingly, ask yourself what you would like to see physically in place, what would be better than what is being done now, and contrast those things with what the future shelter occupants desire. Bear in mind two guidelines that are paramount:

   (a) You must respect the generally understood safety and health standards, and

   (b) What you design must be saleable. Reality dictates that the end product must be something that the public desires. Try to provide the shelter occupant with the impression that he has obtained more for less cost.

   You must justify why you think people will want what you propose if it is too far a step from what is currently being built. Please bear in mind that the market demand could change during the several years the land is developed.

2. Your design should address both the land development itself as well as the housing forms on the land.

3. In approaching the area of how your ideas may conflict with what is currently permitted under existing rules and regulations, consider the intent behind these rules and how you might meet their intent in a better way.

With respect to roads and servicing design, allow your common sense and experience to dictate that which is practical from an initial cost and maintenance cost point of view as well as safety.

You should provide us with a list of existing rules and regulations that have not been adhered to, the reasons why your ideas merit a change to these rules and regulations and, where possible, an analysis of the savings that would result from your ideas.

4. Density — approach this question from the point of view of how high the density can be taken and still respect how people live or want to live. There are no other constraints on a relatively high density.

If your proposed densities are substantially in excess of 22 persons per acre or six units per acre, please provide extra sketches of streetscapes to identify clearly how you have treated the density and why you have treated it so.

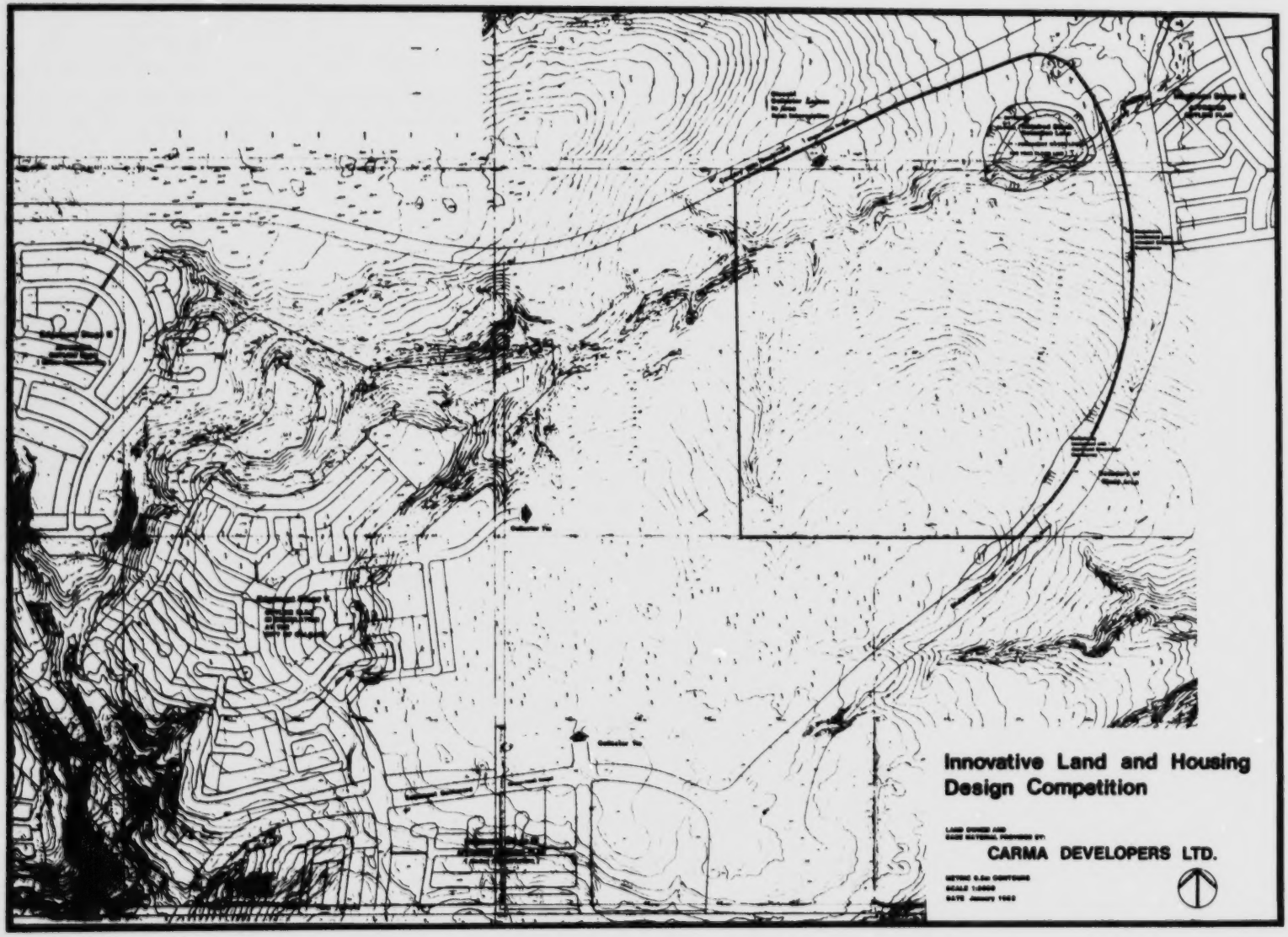
5. The proposals should appeal to a variety of income levels.

6. You can propose any mix of land use provided they are property integrated with one another and with existing land use on adjacent parcels.

7. The parcel of land contains areas which include "environmental reserve" and sloped areas. When planning for these areas, bear in mind the legal requirements for environmental reserve and the generally understood guidelines of what is or is not environmental reserve. Please respect the existing grades and consider in your design for these sloped areas, a common sense approach to the practicality of road slopes and maintenance of these roads.

8. The yield of the land should be otherwise maximized by avoiding common design pitfalls.

GOOD LUCK!!


Innovative Land and Housing
Design Competition
CARMA DEVELOPERS LTD.

PLANNING AND ENGINEERING BACKGROUND INFORMATION
JANUARY 1982

INTRODUCTION

The study area is located in the northeast portion of Edgemont. Edgemont is the designed name for a large area of land comprising approximately 625 hectares in northwest Calgary, which is being developed as a comprehensively planned, low density residential community. Edgemont is one of Calgary's developing communities which is attracting second and subsequent home buyers to a full range of estates, single, semi-detached and townhouse homes. In addition to having exceptional views in a spectacular natural setting, Edgemont currently has an attractive convenience commercial centre and a first-class racquet club. Future public recreational development is anticipated in addition to the development of a 10.8 hectare sub-regional shopping centre which will include a full range of retail-commercial, service and professional office facilities. Although no school facilities are presently located within Edgemont, an elementary school is projected for 1983 and school reserves have been included in the development of each of the "cells" within the community. In addition to the excellent automobile access presently available, an extensive transportation system is planned around the community. The internal road pattern has been designed to accommodate public bus transit. Several bus routes presently serve the community. These routes will eventually link into the future northwest Light Rail Transit Line on Crowchild Trail.

The community is located 10 kilometers from both the Central Business District and within a convenient distance of all necessary public and private amenities such as school, hospitals, and shopping facilities. The open spaces within the community are well integrated into the existing and proposed public open space system in northwest Calgary. This includes the 600 hectare Nose Hill Park, the Bow River Park system, and the Nose Creek and Beddington Creek open space systems which comprise both active and passive recreational facilities linked by a system of walkways and bicycle paths.

THE STUDY AREA

(a) Boundary

The study area encompasses approximately 75 hectares. It is bounded on the north by the fixed alignment of Country Hills Boulevard (a major road), on the east by the fixed alignment of Shaganappi Trail (an expressway), and on the south and west by lands on which there has been preliminary planning work. Further to the west of the study area is Edgemong V for which an Outline Plan was submitted to the City by Carma Developers Ltd. prior to Christmas. The lands north of Country Hills Boulevard have not been included in any planning work to date. The lands east of Shaganappi Trail are within the MacEwan community. Outline Plans have been approved in this area.

(b) Topography and Soils

The topography of Edgemont can be described as upland plateau containing steeply sloped hillsides traversed by deep coulees or gullies. It is one of the highest plateau areas in north Calgary which enables some spectacular views. The subject lands contain the topographical elements of the Edgemont area: slopes, plateaus and gullies. A slope analysis has been done which should clearly indicate the nature of the slopes in the study area. The land within the study area has very little significant vegetation other than prairie grasses.

Detailed geotechnical and slope stability studies have been carried out on the lands. Generally the soils consist of topsoil overlaying silt-clay till of various thicknesses overlaying a clean, sandy gravel overlaying siltstone bedrock. Test hole readings indicate that groundwater should not pose problems to future development of the area. Although portions of the study area are sloped, the existing ground has no slope stability problems.

PLANNING BACKGROUND

(a) General

In September 1979, Calgary City Council approved the Crowchild III Area Structure Plan which provided the Planning framework for future development of the entire community. Copies of the Area Structure Plan can be obtained from the City of Calgary Planning Library.

The base plan indicates the area of the study area and the status of development on adjacent lands. Although the lands to the south and west of the subject lands have had preliminary planning done on them, they need not be considered in detail except that collector ties must be made through these lands to

provide access from the study area to Edgemont Boulevard. No access can be made to Shaganappi Trail. The indicated access to Country Hills Boulevard is the closest point at which access can be taken from the study area to Country Hills Boulevard due to intersection design standards.

(b) School Sites

The Crowchild III Area Structure Plan indicates an elementary public school in the vicinity of the southern boundary of the study area. This school site may be incorporated into the plan for the study area or located outside the study area. In either case, the relationship of the study area to be possible school site should be considered. As noted on the base plan, a 9.7 hectare joint use site which could accommodate a public junior high school as well as both a separate junior high and separate elementary school is located within the proposed Outline Plan for Edgmont V.

(c) Municipal Services

Water will be supplied to the area from existing distribution mains in the community of MacEwan to the east of Shaganappi Trail. Sanitary and storm services will feed towards the north-east corner of the study area. The storm water detention pond located in the plan has been located as a result of extensive storm water studies. Since present City standards require that urban stormwater runoff is to be controlled such that the post development discharges from the development area do not exceed the rate and volume of flow existing under pre-development conditions, the pond can be considered as a given. However, planning concepts may recommend alternate solutions to storm-water runoff which would result in variations or an absence of a storm pond. The permanent water level surface area of the pond indicated is approximately 2 hectares and will effectively store the 1:100 year storm without overflowing.

Electrical, natural gas, telephone, and cable T.V. service for the area will be provided by extending existing underground mains from adjacent developments.

POSSIBLE IDEAS FOR CONSIDERATION

Subdivision Design, Mix of Use

- Should strike a theme or identity for each area and follow through on this in all design details including roads, sidewalks, light standards.
- Each neighbourhood should stand on its own — services and amenities should be of a local rather than metro nature - each area should have its own shopping, schools cycling, walking paths, pubs, etc.
- Amount of land devoted to separate uses, particularly schools is excessive and opportunities to better utilize the land use are lost. The amount of land utilized could be decreased and neighbourlines increased by shopping, schools, reserve, and other community uses sharing the same site.
- Rather than large parks, try connected, narrow but linear parks.
- Diversify away from hard edge between single family and multi-family — better integration of uses of land and more variety of use within a given area — integrate single family, rental townhouses and apartments, including highrise, social housing and senior housing — multi-family too set apart and too large, limit multi-family to 50 units for one project.
- School sites need not be flat.
- Design the area and the home to suit the residents' changing lifestyle and lifecycle so that he need not leave the community - that is, design to changing needs of children growing up, children having left the home, etc.
- Maintenance — how provide incentives to adequately maintain the home and fencing and encourage landscaping - or how design to minimize necessity of maintenance.
- How to separate cars and people — concept of landscaped pathways for rear access.
- Need thorough planning of all aspects of subdivision and homes.

- Ownership that permits shared elements such landscaped spaces could ease maintenance problems, increase feeling of community and neighbourliness and provide some of the thoroughness of planning needed at the design stage. Initial costs of such landscaping, etc. would thus be shared.
- Densities — 22 p.p.a. can now be accomplished with single family - why not higher densities.
- Recreation for kids — address the needs of the 10 to 15 year age group - provide year round use not necessarily tied into community association facilities - quality and intensity of use should be improved - should be in closer proximity to the home.
- The Melcor Ranchlands experiment — what succeeded, how could it be improved.
- Attitude should not be how do we shrink what we are currently providing but rather how do we build from the ground up.
- Where the lots are sold to a number of builders, how do you improve architectural control to accomplish these ideas.
- P.U.D. — minimize zoning rules for a parcel of land to allow any use from single family to apartments.

Setbacks, Sideyards, Lot Design

- Need a more urban attitude to design in the suburbs:
  - — Integration of housing forms
  - — Detail in landscaping design
  - — Visual and sound privacy
  - — Privacy areas emphasized - reduced front yard and setbacks - but rear yard smaller and more intensely designed and used - put space where it can be used to maximum benefit of resident.
- Is the 30 foot by 80 foot lot the ideal size and shape.
- Landscaping — more intense - perceived to be shared by the whole community.
- Better and more intense use of sideyard on zero lot line - courtyards, patios, landscaping.
- Address social and cultural acceptance of less front yard, reduced setbacks.
- Variety of lot shapes and sizes - flat lots, etc.
- Must create increased "perceived value" in eyes of potential resident — getting more "value," not less in terms of lot sizes, etc.

Roads and Servicing Standards

- Address how provide adequate fire and emergency protection and health and safety standards but with changed R.O.W.'s, pavement widths, less land consumed in roads and less expensive servicing.
- Double loading (street and lane) undesirable.
- Water orientation as a landscape, open space element — retention ponds could be one-half acre to 10 acres, not limited to five acre sizes - retention ponds could be purposely designed to look like sloughs.
- Streets could take on a more rustic setting - narrow, one way.
- In condominium sites — services and roads owned and maintained by City.
- Bus only roads.

Housing Design

- Method of selling land leads to sideyards, front yards, size of lots as we now see them. How could the land be sold to get away from this.
- More emphasis to energy conservation design in the house and land design.
- Designs for greater utilization of sloped lands.
- Explore "double zero lot lines" — attached at sides but staggered front and rear.
- Design home so that homeowner can temporarily rent part of the space to generate income to afford the mortgage. Rented space would later be an extension of the one resident home to allow added features of a family room, third and fourth bedroom, etc.
- Innovation needed in financing and lending.

Security, Crime

- Should design an area to make it uncomfortable for the criminal but comfortable and "neighbourly" for the resident.
- Prefer small segmented parks visible from home.
- Low cost projects with less number of units tend to reduce crime and police problems.
- Important to maximize neighbourliness – meet, mix, socialize, to reduce crime and problems.
- Need to address lock mechanisms, lighting of alleys, extent and placement of landscaping and parks.

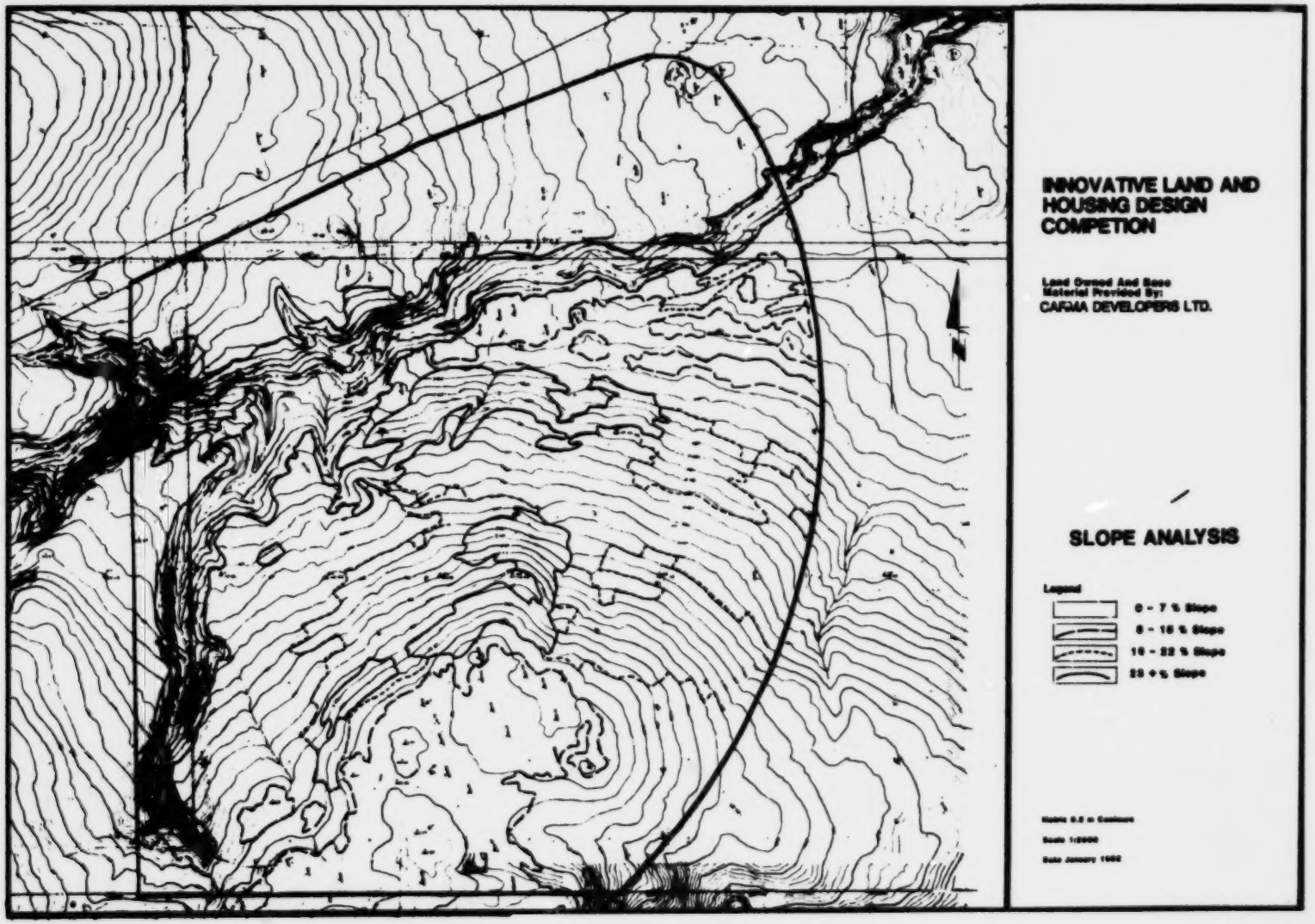
Parking

- Automobile a necessity (sometimes three) — how separate cars and people, how plan for parking of these vehicles.
- Try common parking for even single family utilizing the R.O.W. or another separate area shared by residents but in such a way that it does not hinder or interfere with other residents.

Recurring Comments

Several comments were repeatedly mentioned regardless of the individual's background or interest:

- Parking — how can it be handled in a better manner.
- Neighbourliness — how do we design for more common amenities on less space and encourage the impression of sharing, of community for the benefit of all.
- High cost of existing roads and servicing guidelines, necessity of lanes, and high percentage of land devoted to roads.
- Lack of landscaping in suburbs.
- Diversity of housing forms needed in the suburbs.

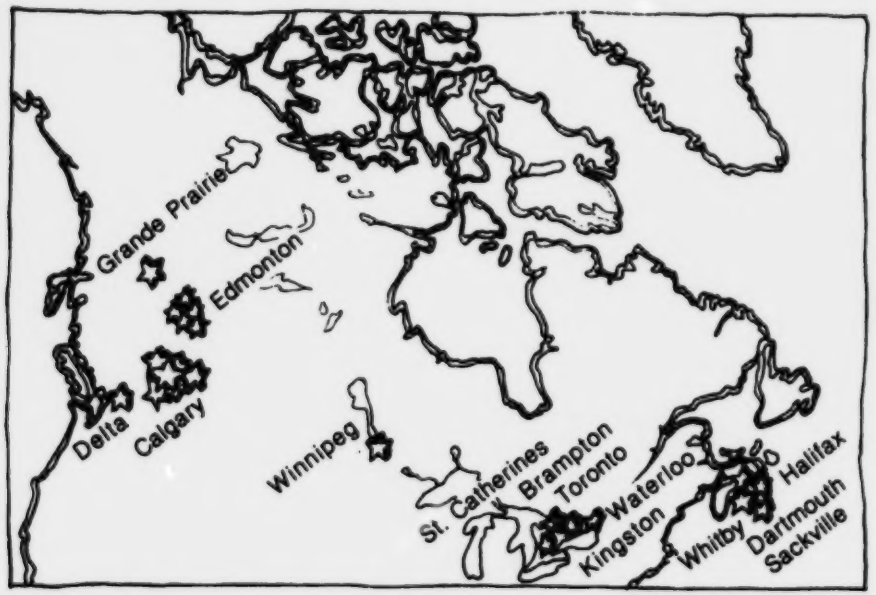

INNOVATIVE LAND AND HOUSING DESIGN COMPETION
Land Owned And Base Material Provided By:
CAEMA DEVELOPERS LTD.
SLOPE ANALYSIS
Legend
0 - 7 % Slope
8 - 15 % Slope
16 - 22 % Slope
23 + % Slope

COMPETITION PHILOSOPHY

Innovation as a concept was purposely left undefined: very general and basic guidelines were given out instead, to encourage creative, innovative, yet practical ideas. Two levels of entry were called for and accepted: 1) complex and comprehensive proposals, and 2) simple, brief ideas. There were 54 submissions, approximately 400 to 500 pages — an overwhelming response, which suggests that the conversational, loose competition outline struck a chord in many people who might have otherwise been intimidated by a more formal approach.

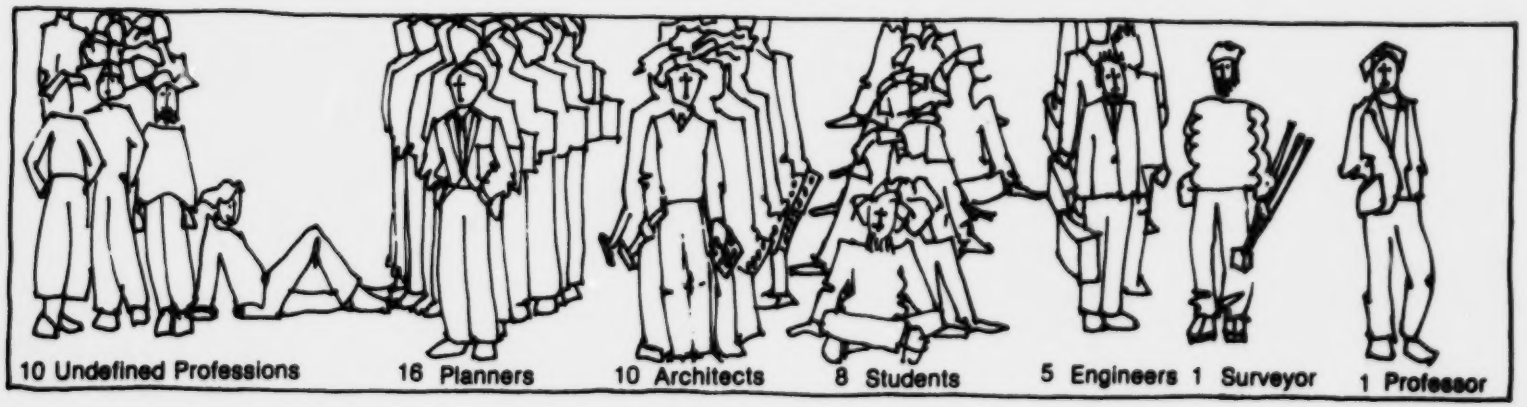
The submissions were to be considered for sites throughout both the city and the province. As well, the terms of reference asked that the proposal be marketable, with mass appeal, and saleable within the next 3-5 years. This limited the degree of innovation explored — the safe, marketable route is not reputed to be particularly revolutionary. This was the crux of the judges' dilemma — their concepts of innovation were modified by the schemes submitted.

THE ENTRANTS



Submissions received

This competition was unusual in that it appealed to anyone to submit ideas, not just a call to design professionals. The option was there to tackle either the whole site, or just a part of it, and indeed some fairly interesting ideas were proposed by obvious neophytes in the planning, architecture and landscape fields. As very often the success of a project lies in its details, it is the details that busy designers tend to overlook — just how the road meets the sidewalk, or exactly how the berm is landscaped. These details that the user, the public sees were the areas that were most often addressed by the lay submissions. In the professional realm there were also pleasant surprises. Sometimes it was the landscape designers who had truly innovative ideas about servicing, the architects about financing or road layout – the opportunity for people to comment on areas outside their normal areas of practice was well taken. What was often conspicuous by its absence was the integration of good ideas into a meaningful whole. Possibly because of a relative lack of experience in entering competitions the entrants did not realize that this too is an important part of a good submission.



THE JURY

The judges were: J. Bell, Alderman, City of Calgary
M. Chornoboy, Qualico Developments Ltd. Calgary
L. Guyn, Manager, Urban Development Division, City of Calgary
P. Hemingway, Architect, Edmonton
R. Jantzen, Executive Vice President, Carma Developers Ltd., Calgary
R. Kinney, Professor and Director, Urban & Rural Planning Studies, University of Alberta.
K. Maitland, Nu-West Development Corporation
D. Newby, Walker Newby & Associates, Calgary
G. Steber, Director of Planning, City of Calgary

The judging process was selective: after all the judges familiarized themselves with both the competition guidelines and the submissions, there was an initial selection of projects. These were set aside for further evaluation in depth. After another selection, the remaining projects were evaluated using a point-awarding form.

Awards were made in different categories – 2 prizes each in Housing Form, Land Development and Technical Solutions, 3 merit awards and 2 student awards.

While the judges chose what they feel were the best schemes, they all admit that a certain amount of refinement must be done before they could be considered real schemes. Some interesting hindsight comments on the jury process were received for this report: George Steber, Director of Planning with the City of Calgary states, "I suspect that the jury, as varied as they were, needed more time to study the submissions, re-familiarize themselves with the conditions to ready themselves to assess the 'evaluation criteria' sheets before judging began . . . Once the process was accepted and understood by the jury it went reasonably well. It would be impossible to say that each jury member evaluated a particular scheme highly for the same reason. On occasion, the jury was swayed by the quality of the presentations, colour, perspectives of quite ordinary schemes."

Ron Kinney, Director of Urban and Rural Planning Studies, U. of A., corroborates: "The jury did not have time to effectively balance the various aspects of the entries, yet, in true 'group' tradition some acceptable suggestions and decisions were made."

It was ever thus, and should be kept in mind by future entrants to similar competitions. While many of the judges found the process adequate and felt that the wide range of experience in the judging team was able to be quite efficient in choosing good schemes, there is obviously room for some changes.

As winners in the various categories brought forward some good ideas, the bulk of entries as a whole was scrutinized as a representative of the state of the art in the design world. The judges comments on that follows:

Peter Hemingway, Architect, Edmonton, Alberta wrote, "...(there) was a general lack of awareness of behavioural design principles amongst the competitors. Without this knowledge, planning becomes too often merely an exercise in presentation."

George Steber pointed out that "The jury generally was disappointed that no single entry was that novel, new, timely, etc. Most were tired schemes with new cloaks. Some were clearly inappropriate and traditional in concept and hadn't resolved the unique aspects of the site which was not an easy site to design."

Ron Kinney comments, "Frankly, the quality of the entries could, for the most part, be regarded as standard at best. Most of the submissions were not provocative nor particularly noteworthy."

Well, this might be a bit harsh — many gems were found in the rubble when the submissions were carefully read for the preparation of this report. It is up to you, however, the readers of this report, to judge the results for yourself.

THE GRAPHICS

Graphics are more susceptible to whims of fashion than perhaps design is, although there is a rough correlation between the style of graphics and the image of the design.

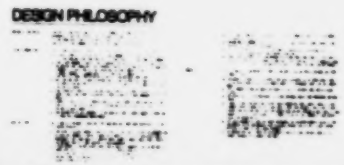
Shed roof cedar siding townhouses which reached their acme of popularity in the late 70's are invariably presented in freehand, felt pen elevations.

Those designers who do not consider physical form to be very important concentrate their presentations on evocative perspectives which diminish the architecture and emphasize the people.

Axonometrics show the geometry of architecture: they emphasize its formality and tend to be used by analytic designers.

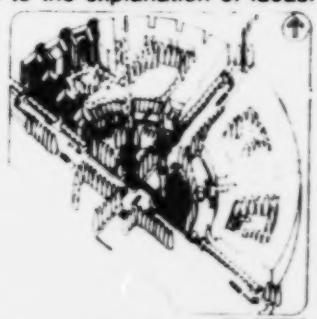
As design emphases come and go, so do the popular presentations.

The most remarkable deja vu was the submission of John Higgins from Edmonton. Beautifully executed, surreal collage perspectives, much in the mode of English architects of the late 1960's, revealed an architectural solution lodged deep in that same era. An extremely clean and well designed proposal, its major problem was that it was not of this time.



The submission of Frank Moir of Proctor Redfern Butler Krebes & Assoc., Calgary, was perhaps the most seductive of all the 54 entries. Black freehand line drawings and photographically enlarged blocks of type text were printed on acetate and then mounted over rich felt pen sketches. The planning was equally rich and interesting: lucid, a balance between the formal and informal, and the use of the architectural typology of prairie industrialism.

The graphics used in the submission by the Sturgess Partnership typified the diagrammatic approach to the explanation of ideas. The architecture and planning is also diagrammatic -- both in concept and in resolution. There is a light-heartedness in a graphic approach such as this, mostly as a result of the gentle drawing style which sets it apart from the bulk of the submissions.



The presentation of ideas is a very important component in a competition entry. The graphic style can either grab a jury member or alienate him completely (or worse it can be so boring as to make the submission invisible). Also, it can either clarify an idea or bury it in obscure detail. It is undoubtedly 60% of the submission.

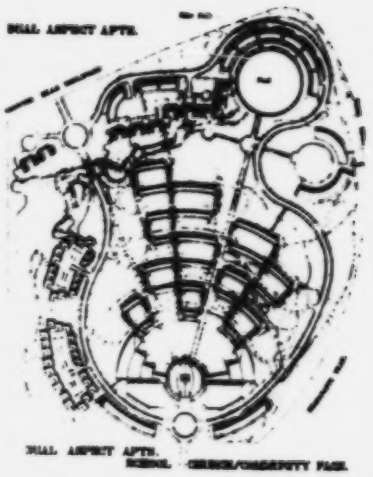
OVERVIEW OF ENTRIES

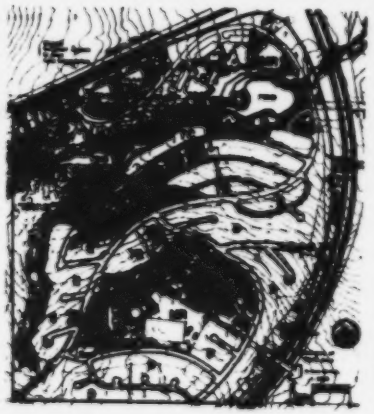
So you want to be a competition star! Well if you do, make sure your presentation shows it. Each of the major winners had submissions mounted on foam core, with crisp black line prints of PMT's. Judges are only human and like to feast their eyes on good looking work like everyone else. Many good ideas were lost in submissions where the writing was too small, the print too faded, the graphics too busy. This is obviously where professionals have the advantage over lay people, but generally the more clear and definable the concept, the more clear the presentation. Some entrants bent the rules and used colour and were *not* reprimanded, indeed one was even rewarded, but don't count on this always working. In strict competitions it would mean instant disqualification.

As for the content of the submissions, the most common failing was that although this was a competition calling for *innovative* ideas, the bulk of competitors applied current, status quo ideas to the site--albeit well, but not with any sense of freshness. Row housing and cul-de-sac layouts are no longer considered innovative--they are ideas which have been built all over North America over the last 50 years, yet almost 90% of the submissions featured quite ordinary row houses and cul de sacs.

There was a surprising disjunction between planning, architecture and landscape in the proposals. Many entries had these 3 components drawn by different hands, the only connection between them being the title block. This is a reflection of the professions in real practice--lack of integration leads to less than coherent built projects: landscaping is often a decoration tacked on at the end, planning has all its romance suppressed by servicing concerns and architecture fills in the blocks. This state was unfortunately still evident in the competition entries which ought to have felt freer than in real life.

In this competition planning ranged from the organic and serpentine, to grid-like rigidity. Tight layouts with formal axes, focal points, radiating road systems tended to go hand in hand with adventurous architecture, with little attention being paid to the extremes of topography on the site.



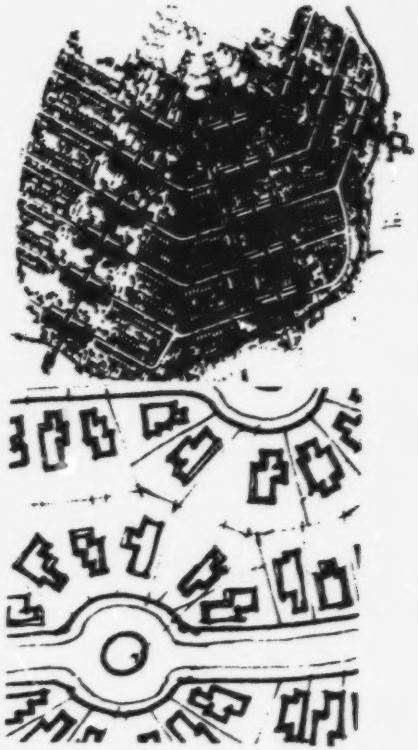


At the other end of the scale, the layouts that undertook to respond to the slopes, the ravines and the environment at large, tended to be filled with conventional building forms. This has something to do with the lessening of the pro-environmental stance of the 1970's represented by a low profile, earth toned architecture and the rise of 1980's New Formalism which stresses artifice. Both have merits in theory, but at the time of competition little in the way of formalism had been built and tested.

The judges did not respond well to formality, but gravitated toward the terrain-responsive solutions. This is perhaps a comment on the jury's capability to judge innovation. There was a marked tendency to praise the predictable. Once again, it must be stated, there is a difference between doing a tested and accepted idea well, and doing something innovative. A road which follows the contours will work, but is not new. On the other hand, roads which cut across contours at 20% grades using heat tapes *is* new. The entrants generally eschewed technological solutions, but when they stepped out of conventional planning and used something as futuristic as power walkways at the scale of a 40 acre subdivision, the results were very exciting.

Meanwhile, the single family house refuses to die. The target for most entrants was to achieve the advantages, the identity and the propriety of a single family house on a lot, with the economics and compaction of multiple housing. This was perhaps the best covered area of the competition. Variations on conventional lot siting, house clusters, platform housing and bermed housing were many and inventive. Perhaps because innovation at this small and local scale seems more easily handled than at the scale of the whole site, some schemes suffered from a concentration in this area.

All levels of a site design must be done well to be convincing — the test of a creative designer is his ability to synthesize talents, ideas, production and implementation successfully.



AWARDS AND COMMENTS

A post-competition committee was established to discuss the future of the competition results. This was made up of some of the entrants, some of the jury & some of the organizers. Packages were sent for comments for this report as after the fact comments on the winning schemes. Those who commented are listed here:

Don Bortoluzzi; Copez Investments, Calgary, Alberta, Chairman of the Innovative Housing Committee.

Lee Guyn; Manager, Urban Development Division, City of Calgary, Engineering Dept., original juror.

Peter Hemingway; P. Hemingway Architect Ltd., Edmonton, Alberta, Past President of the Alberta Association of Architects, original juror.

Blaine Norton; Alberta Home Mortgage, Calgary, Alberta.

Ron Kinney; Director, Urban and Rural Planning Studies, Faculty of Extension, University of Alberta, Edmonton, original juror.

George Steber; Director of Planning, City of Calgary, original juror.

Barry Pendergast; Barry Pendergast Architect, Ltd., Calgary, Alberta. Original entrant, winner, and member of post-competition committee.

LAND USE AND DEVELOPMENT

FIRST PRIZE: Jack Long + the New Street Group
SECOND PRIZE: IBI Group, David Thom

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JACK LONG AND THE NEW STREET GROUP

FIRST PRIZE: CALGARY, ALBERTA
Land Use and Development

SECOND PRIZE:
Housing Form

(original jury comments)

The attributes of the design were: the flexibility to change road designs and increase density by gentle rearrangement, the efficient land use given the land used, the modest scale of housing, diversity of housing type, the community building as a focal point for the provision of municipal services, and the road access to both sides of the water area. The entrant also addressed energy conservation, minimization of maintenance, privacy and the ability of various parties to construct the housing form. Concerns were expressed about one-sided servicing, road grades, potential noise levels from roads and lack of defensible space.

L. Guyn:
Well prepared submission with good deal of thought given to housing form.

P. Hemingway:
The great virtue of this scheme is that it can be developed in a variety of ways. The edge conditions not well handled. More boundary definition needed. This design is a combination of recent ideas and succeeds because it is practical and realisable. Housing can be built by individuals or companies – and it is not overly pretentious.

B. Norton:
Good recipe: strong traditional planning and a touch of innovation: probably receptive by developer. Cluster housing basically townhouse design. A denser type may be appropriate.

B. Pendergast:
Jane Jacobs expressed concepts similar (mixed use) many years back — why does it take so long to get them incorporated? Density does not justify the amount of linked units: could be more open with use of courtyard units. I feel that the amount of open space causes problems of long term maintenance. Overall I liked the scheme best in the way in which planning and sound aspects are brought together. Seemed weakest in 3-dimensional form.

G. Steber:
The concept provides a well integrated, diversified community with good sense of place and overall area feeling. There is variety of accommodation providing higher total density with a range open space. Good level of community and local services. Economic solutions: respect for topography and orientation. Conversion possibilities – adaptability to changing needs. Flexibility needed in subdivision and landuse to realize concept.

[illegible] WAYS TO MAKING HOUSING AS THE CONSUMER AT LESS COST

NEEDED IS A 'BREAKTHROUGH' TO REDUCE HOUSING COSTS TO THE CONSUMER. ALTERNATIVES TO REDUCE LAND DEVELOPMENT COSTS AND CONSTRUCTION COST SAVINGS ARE POSSIBLE, BUT NOT THE TOTAL ANSWER.

1 ONE WAY IS TO FACILITATE 'SWEAT EQUITY', WHERE OWNERS COMPLETE THEIR DWELLINGS USING THEIR OWN LABOUR. A DEVELOPER INSTALLED COULD LEAVE PORTIONS UNFINISHED AND DELIVER THE DWELLING AT A LOWER COST. IT IS NOT ONLY A WAY TO SAVE MONEY, BUT TO ADAPT AN INVESTOR HOU COMPLETE SITE IMPROVEMENTS TO SUIT AN OWNER'S PARTICULAR NEEDS.

2 HOME OWNERS WITHOUT SKILLS COULD ACHIEVE THEIR THROUGH TRAINING PROGRAMS CARRIED OUT IN THE COMMUNITY CENTRE. THIS COULD BE A SPECIFIC PROGRAM SET UP BY CANMA IN CONJUNCTION WITH A PROVINCIAL GOVERNMENT AGENCY SUCH AS C.M.A.P. SKILLED HOME OWNER TRADESMEN COULD CONTRACT THEIR SERVICES TO OTHER OWNERS. THESE COOPERATIVE EFFORTS ARE NOT NEW, THEY WERE ONCE THE NORM IN HOME BUILDING. OUT OF ECONOMIC NECESSITY, THEY COULD BE REDISCOVERED.

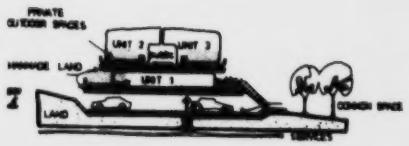
3 ANOTHER WAY IS FOR DEVELOPER BUILDERS TO PROVIDE A COMPLETED 'SHELL' OR 'BASIC SPACE' DESIGNED TO TAKE A RANGE OF COMPONENT PARTITIONS, DOORS, CLOSETS, AND CABINETS, IN THE FORM OF KITS TO COMPLETE INTERIOR SPACES TO A VARIETY OF FLOOR PLANS. THIS METHOD IS INDICATED FOR THE SENIOR CITIZENS HOUSING, AND COULD BE ADAPTABLE FOR MUCH OF THE HOUSING IN THE WHOLE PROJECT. A SUPPLY OF KITS COULD BE KEPT ON HAND AT A WAREHOUSE THAT IS PART OF THE DEVELOPMENT.

4 PERMIT THIS NEW RESIDENTIAL COMMUNITY TO HAVE A COMPONENT OF HOUSING THAT INCLUDES VARYING FORMS OF HOME OCCUPATIONS. HOME INDUSTRIES SUCH AS TV REPAIR, COMPUTER EQUIPMENT SALES, MAIL ORDER BUSINESS, HOME BAKERY, CRAFT PAINTING, CRAFTS, TEXTILES, ETC. COULD BE ADD FROM PARTS OF THE DWELLING OR ADJACENT PAVILIONS.

5 RESIDENTS COULD OPERATE A CORNER STORE, A FLORIST SHOP, A SMALL RESTAURANT, A TEAHOUSE, ETC. FROM A PORTION OF THEIR HOME. SMALL PROFESSIONAL PRACTICES FOR ENGINEERS, ARCHITECTS, ACCOUNTANTS AND DOCTORS COULD EASILY BE ACCOMMODATED IN A RESIDENCE LARGE ENOUGH TO SERVE BOTH LIVING AND WORK.

6 SOME DWELLINGS COULD BE PARTICULARLY ADAPTIVE FOR CONVERSION FROM A SINGLE TO DUAL DWELLING, THIS DONE LEGALLY, NOT ILLEGALLY, THROUGH PROPER PRE-PLANNING.

7 ALTERNATIVE IDEA TO CURRENT MORTGAGING: THE PLAYFORMED LOW DENSITY MULTIPLE HOUSING SCHEME OFFERS A POSSIBILITY TO CONSTRUCT SEVERAL PLATFORMS ON WHICH TO BUILD DWELLINGS. THIS BASIC 'NEW LAND' AND SERVICED INFRASTRUCTURE COULD BE SEPARATELY FINANCED OVER A LONGER PERIOD OF TIME, WITH SHORTER YEAR, LOWER COST MORTGAGES FOR THE INDIVIDUAL DWELLINGS. THESE DWELLING UNITS HAVE ALL THE AMENITIES THAT QUALIFY THEM FOR MORTGAGE FINANCING, NOT ONLY FOR THE DEVELOPER BUT ALSO THE INDIVIDUAL HOME OWNER OR RENTER.



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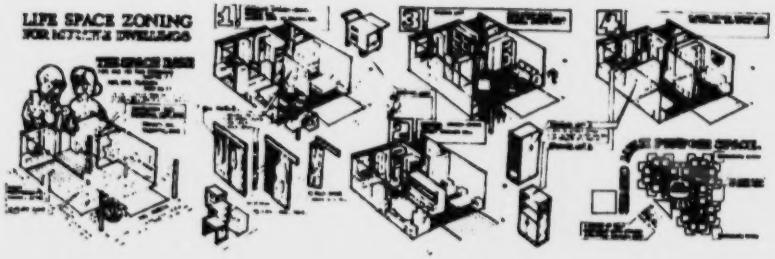


SUCH A COMMUNITY WOULD BE A DEPARTURE FROM THE NORMAL SUBDIVISION, BUT NO DIFFERENT THAN MANY OLDER COMMUNITIES THAT HAVE HAD THIS VERSATILITY FOR YEARS. IT IS A WAY TO EARN INCOME, AVOID THE TRIP TO WORK AND BACK BY AUTO OR TRANSIT, AND IT WOULD ADD A VITALITY TO THE NEW DEVELOPMENT.

THE SITE DEVELOPMENT PLAN RECOGNIZES ALL OF THE ABOVE POTENTIAL IDEAS, AND APPRECIATES THAT ENVIRONMENTAL COMPATIBILITY OF SUCH FUNCTIONS IS A PLANNING PREREQUISITE.

CALGARY INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

	AREA HECTARES	% OF SITE
ENVIRONMENTAL RESERVE	12.99	16.7
MUNICIPAL RESERVE	22.19	29.6
PUBLIC LOOP & ACCESS ROADS	8.79	11.7
SUB TOTAL	42.95	57.3
DEVELOPABLE LAND	32.[illegible]	42.7
TOTAL	75.[illegible]	100.0

SITE DEVELOPMENT CONSIDERATIONS - INNOVATIVE COST EFFECTIVE IDEAS

GRADING

MAKE MINIMAL GRADE ADJUSTMENTS TO EXISTING GRADES.
MINIMIZE CURBS AND STORM RUN-OFF, I.E. [illegible]
UTILIZE NATURAL SURFACE DRAINAGE PATTERN - NO STORM SEWERS.
SWALES AND TREES BESIDE ROADWAYS TO TAKE WATER RUN-OFF.
ALLOW DRAINAGE ACROSS PRIVATE PROPERTY.

SERVICES

EASY ACCESS FOR MAINTENANCE OF SERVICES.
NO DIFFERENTIATION BETWEEN PUBLIC AND PRIVATE WATER MAINS.
LIMITED PUBLIC ILLUMINATION.
KEEP SERVICES OUT OF PAVED AREAS.

ROADWAYS

ONLY MAJOR PUBLIC RIGHT-OF-WAY IS ACCESS TO SITE AND LOOP ROAD WITH NO PARKING PERMITTED. ALL OTHER ROADS AND LANES ARE IN PRECINCTS AND ARE DEVELOPED TO A LESSER STANDARD: NO CURBS OR GUTTERS, NARROWER PAVED WIDTH, NO PARKING EXCEPT IN DESIGNATED AREAS.
ROADWAYS GENERALLY FOLLOW CONTOURS, MINIMAL CUT AND FILL; [illegible] GRADE OF [illegible].
DELAY SPENDING FULL ROADWAY COSTS AT EARLY STAGE, I.E. DO NOT PAVE PRECINCT ROADS INITIALLY.
ROADS OF ASPHALT, NOT CONCRETE.

LANDSCAPING

START EARLY TREE PLANTING PROGRAM ALONG PUBLIC ROADS AND MUNICIPAL RESERVE AREAS AND POCKET PARK AREAS. PLANT EXCESSIVELY SO TREED AREAS CAN SERVE AS NURSERIES AND BE THINNED OUT AND TRANSPLANTED IN PRECINCTS AS THEY DEVELOP.
ENVIRONMENTAL AND COMMUNITY RESERVE IS LEFT NATURAL, I.E. LOW MAINTENANCE, LOW DEVELOPMENT COST.
LET NATURAL SURFACE STORM DRAINAGE IRRIGATE ALL THE LAND.

PRECINCT SYMBOL	LAND USE CLASS	AREA	PERCENT OF DEVELOPABLE LAND	NUMBER OF UNITS	DENSITY
1	[illegible]	1.58	5.9	91	49.5
2	DC/[illegible]	4.43	16.5	199	20.27*
3	CC	3.92	9.6	[illegible]	15.2
4	[illegible]	1.92	3.2	29	29.6
5	[illegible]	1.96	6.1	195	59.6#
6	DC/[illegible]	2.58	7.9	89	31.8*
7	[illegible]	2.71	8.5	132	48.70
8	[illegible]	2.02	3.6	35	19.79
9	[illegible]	1.09	4.4	32(74)	5.6(171)#
10	[illegible]	4.79			
11	DC/[illegible]	2.45	7.5	72	29.75
12	[illegible]	2.98	9.3	399	46.9
13	[illegible]	1.11	3.5	12(24)	15.0(21)
14	DC/[illegible]	1.61	5.9	52	32.3*
15	[illegible]	1.49	4.5	16(32)	11.1(22)
16	[illegible]	2.78	5.6	130	61.30
TOTAL				[illegible]	32.[illegible]

* PLUS ALLOCATION FOR HOME INDUSTRY
\# CLASSIFICATIONS HAVE DENSITIES LIMITED AS SHOWN

OVERALL DENSITY 32.[illegible] UNITS PER HECTARE

LAND USE STATISTICS

LEGEND

		REF. SHEET
1	LOW DENSITY PUTI-DWELLING CLUSTERS	4
2	MORE INDUSTRY	3
3	PLATFORM HOUSING	6
4	LOW PROFILE ATTACHED FAMILY HOMES	7
5	ADAPTABLE DWELLING CLUSTERS	8
6	1-2-4 HOUSE	9
7	SENIOR CITIZENS HOUSING	5
8	LODGE	5
9	COMMUNITY CENTRE	3
10	RETAIL	3

WHEN A SITE SLOPES TO THE NORTH, AWAY FROM THE SUN, WITH SLOPES GENERALLY DEGRADED AS TOO STEEP TO DEVELOP, ONE MIGHT REGARD THE SITE AS UNDESIRABLE.

WE THINK DIFFERENTLY. THE SITE HAS NATURAL FEATURES THAT CAN MAKE IT PARTICULARLY ATTRACTIVE TO DEVELOP. AND TO THIS THE OPPORTUNITY TO INNOVATE IN A VARIETY OF WAYS (1) LAND USE VARIATIONS THAT WOULD PERMIT A NEW PATTERN FOR SUBURBAN COMMUNITIES TO EMERGE, (2) PERMIT SITE DEVELOPMENT AND DWELLING CONSTRUCTION INNOVATION, (3) GIVE WAY FOR SOCIAL ALTERNATIVES, AND (4) CONSIDER POSSIBILITIES OF VARIED PAGES OF FINANCING TO BEING HOUSING ON STREAM AT A LOWER COST TO THE CONSUMER - THE PROSPECT IS EVEN MORE EXCITING.

A NEW IDEA FOR A SUBURBAN COMMUNITY IN ENGLAND

- THAT RESPECTS THE NATURAL NORTH FACING LAND FORM AND ENHANCES IT WITH A TREE PLANTING PROGRAM AT THE OUTSET FOR SITE STABILIZATION.
- THAT HAS A PORTUGUESE LAND FEATURE QUALIFYING FOR DESIGNATION AS ENVIRONMENTAL RESERVE.
- AN ADDITIONAL MAJOR NATURAL PARK SPACE AS A MUNICIPAL RESERVE THROUGH THE COMMUNITY (PLUS DESIGNED PROJECTS OF PARKLAND).
- CLUSTERED RESIDENTIAL PRECINCTS OF MULTIPLE DWELLING DENSITIES, BUFFER THEM INDIVIDUAL DWELLING UNITS, EACH PRECINCT WITH ITS OWN IDENTITY, YET INTEGRATING AS A WHOLE COMMUNITY.
- A COLLECTOR LOOP THAT MAKES TRAFFIC BUT IS NOT PRESSURE FOR DEVELOPMENT.
- A SMART TERM RESIDENT LODGE WITH PUB, RESTAURANT AND RECREATIONAL FACILITIES.
- A SUBURBAN RESIDENTIAL COMMUNITY THAT HAS THE FACILITIES AND AMENITIES AN OLDER TOWN OR INNER CITY NEIGHBOURHOOD ENJOYS - A SMALL NEIGHBOURHOOD STORE, A FLOWER SHOP, A TV REPAIR SHOP, A BAKERY, ETC., NOT CONCENTRATED AT ONE PLACE BUT SCATTERED THROUGHOUT THE COMMUNITY AT CONVENIENT AND PLEASANT LOCATIONS.
- A RESIDENTIAL COMMUNITY THAT FACILITATES MORE INDUSTRY BY PLANNING AND DESIGNING TO ACCOMMODATE IT IN A COMPATIBLE WAY. WHY NOT HAVE A LIVING/WORKING COMMUNITY?
- DWELLINGS ADAPTABLE TO CHANGE OVER TIME TO ACCOMMODATE CHANGING FAMILY NEEDS. DWELLINGS FLEXIBLE FOR CONVERSION FROM SINGLE TO DUAL.
- AN OPPORTUNITY TO HELP PLAN AND BUILD YOUR OWN NEW COMMUNITY AND DWELLING.

2 MORE INDUSTRY PRECINCTS

CLUSTERS FRAMING INTERIOR COURTS THAT SERVE AS ENTRY TO DWELLINGS THROUGH PRIVACY ZONES OR SCREENED AREAS. COURTS ALSO ACCESS MORE INDUSTRY WHICH ATTACHED TO DWELLINGS OR TO CENTRAL PAVILIONS OF SHARED STUDIO/WORK/OFFICE SPACE.

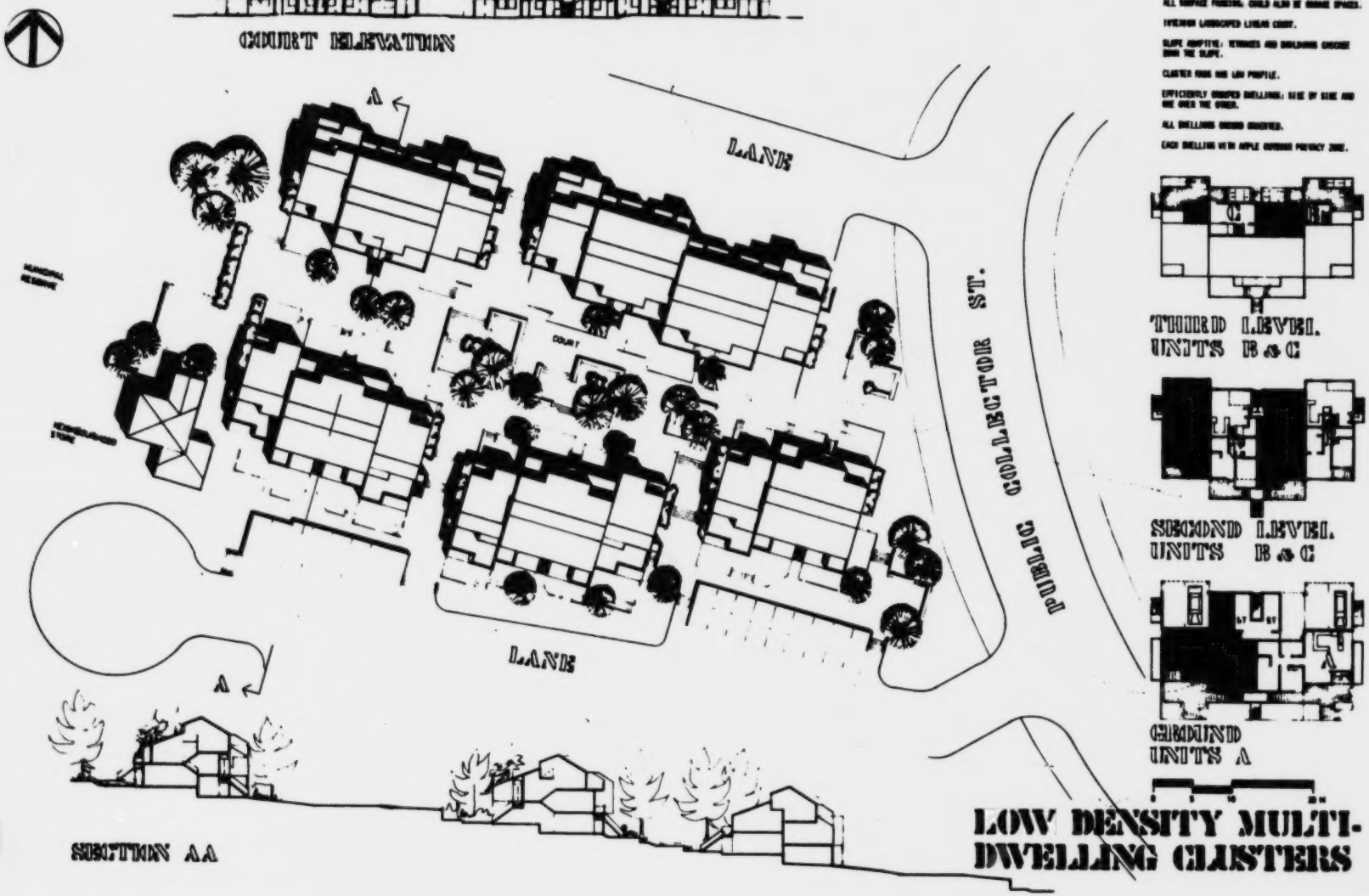
INTERIOR COURTS ARE LANDSCAPED, HAVE AMPLE PARKING AND RECREATION AREAS. SERVICING AREAS ARE SCREENED.

WORK STRUCTURES SCALED TO DWELLINGS.

PRIVATE OPEN SPACE FOR EACH DWELLING IS ON THE PERIPHERY OF THE CLUSTER.

SITE PLAN

COURT ELEVATION



SECTION AA

THIRD LEVEL.
UNITS B & C

SECOND LEVEL.
UNITS B & C

GROUND
UNITS A

LOW DENSITY MULTI-DWELLING CLUSTERS

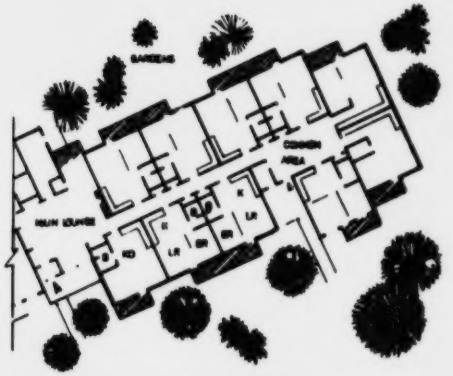
NORTH ELEVATION AND SECTION

SOUTH ELEVATION

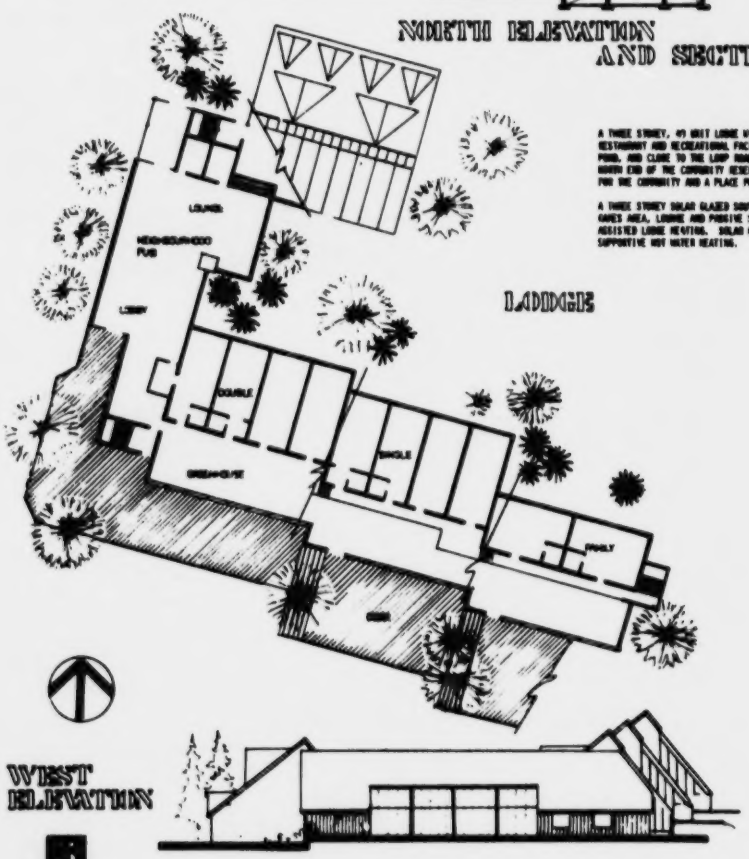
A THREE STOREY, 49 UNIT LODGE WITH LICENSED LOUNGE, COMMUNITY PUB, RESTAURANT AND RECREATIONAL FACILITIES LOCATED ON THE EDGE OF THE POND, AND CLOSE TO THE LOOP ROAD. IT IS THE FOCAL POINT OF THE NORTH END OF THE COMMUNITY RESERVE. IT IS ANOTHER GATHERING PLACE FOR THE COMMUNITY AND A PLACE FOR SHORT TERM RESIDENTS TO LIVE.

A THREE STOREY SOLAR GLAZED SOUTH WALL SERVES AS A CONSERVATORY, GAMES AREA, LOUNGE AND PASSIVE SOLAR HEAT COLLECTING SPACE FOR ASSISTED LODGE HEATING. SOLAR COLLECTORS ON THE UPPER FACE PROVIDE SUPPORTIVE HOT WATER HEATING.

LODGE



PARTIAL PLANNING PLAN



WEST ELEVATION

A 20 UNIT SENIOR CITIZEN HOUSING PROJECT TO ACCOMMODATE A MAXIMUM OF 49 RESIDENTS.

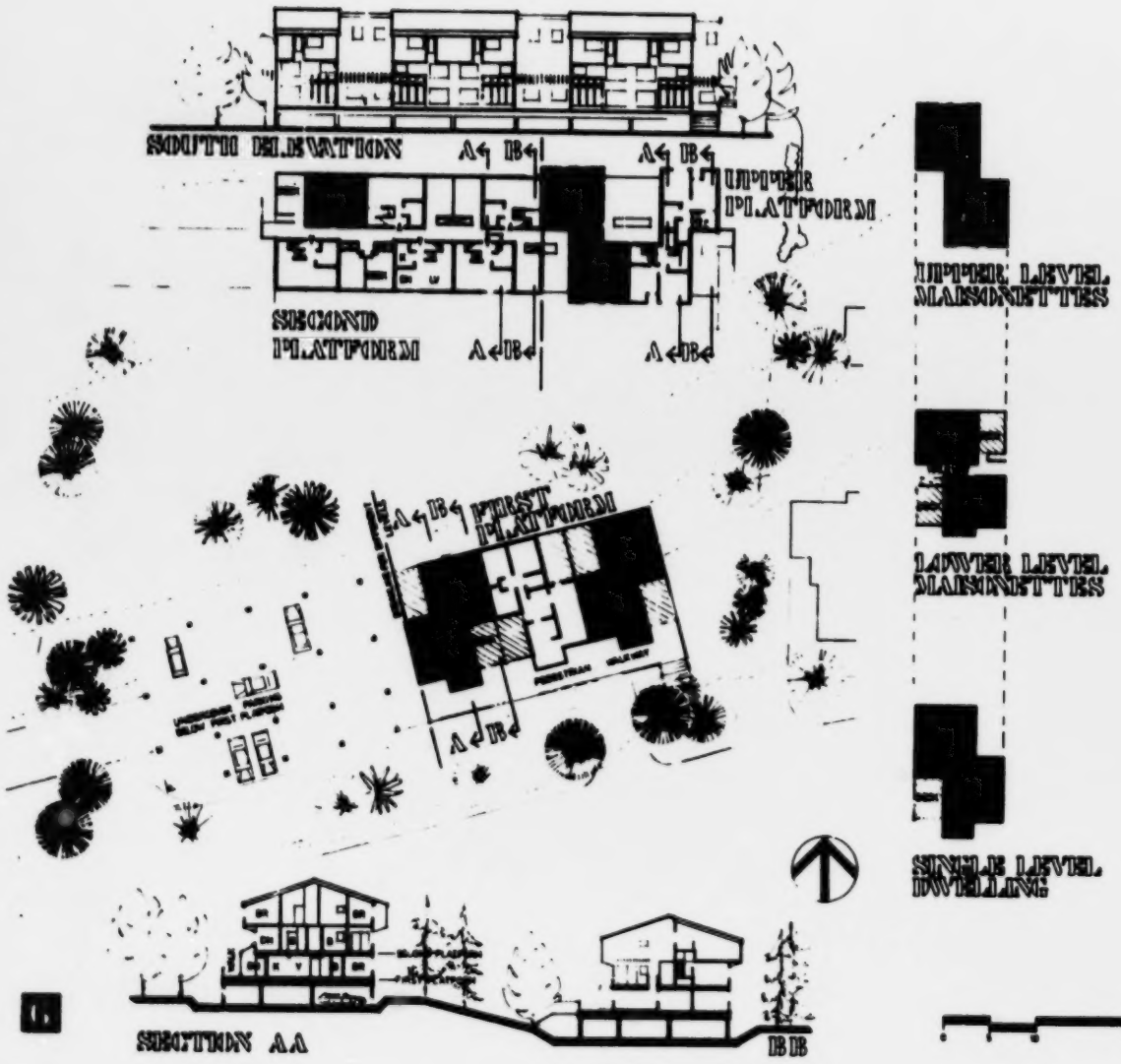
SPACIOUS GROUNDS ARE PROVIDED FOR GARDEN SPACE, LAWN BOWLING, SHUFFLE CLUBHOUSE AND VEHICULAR PARKING. IT ENJOYS CLOSE PROXIMITY TO THE LAKE AND LOOP ROAD.

A VARIETY OF DWELLING UNIT DESIGNS ARE POSSIBLE STEMMING FROM ONE BASIC UNIT SPACE COMPRISING OF THE ENCLOSING WALLS, BATHROOM, AND KITCHEN. EACH DWELLING UNIT, BECAUSE OF ITS DIMENSIONAL SIZE AND HIGHLY FLEXIBLE SPATIAL ARRANGEMENT THROUGH MOVEABLE STANDARD COMPONENTS, IS CAPABLE OF ACCOMMODATING TWO PEOPLE IN A VARIETY OF WAYS. ALL COMPONENTS CAN BE ARRANGED, ADDED TO OR DELETED, DEPENDING ON THE WISHES OR NEEDS OF THE USERS.

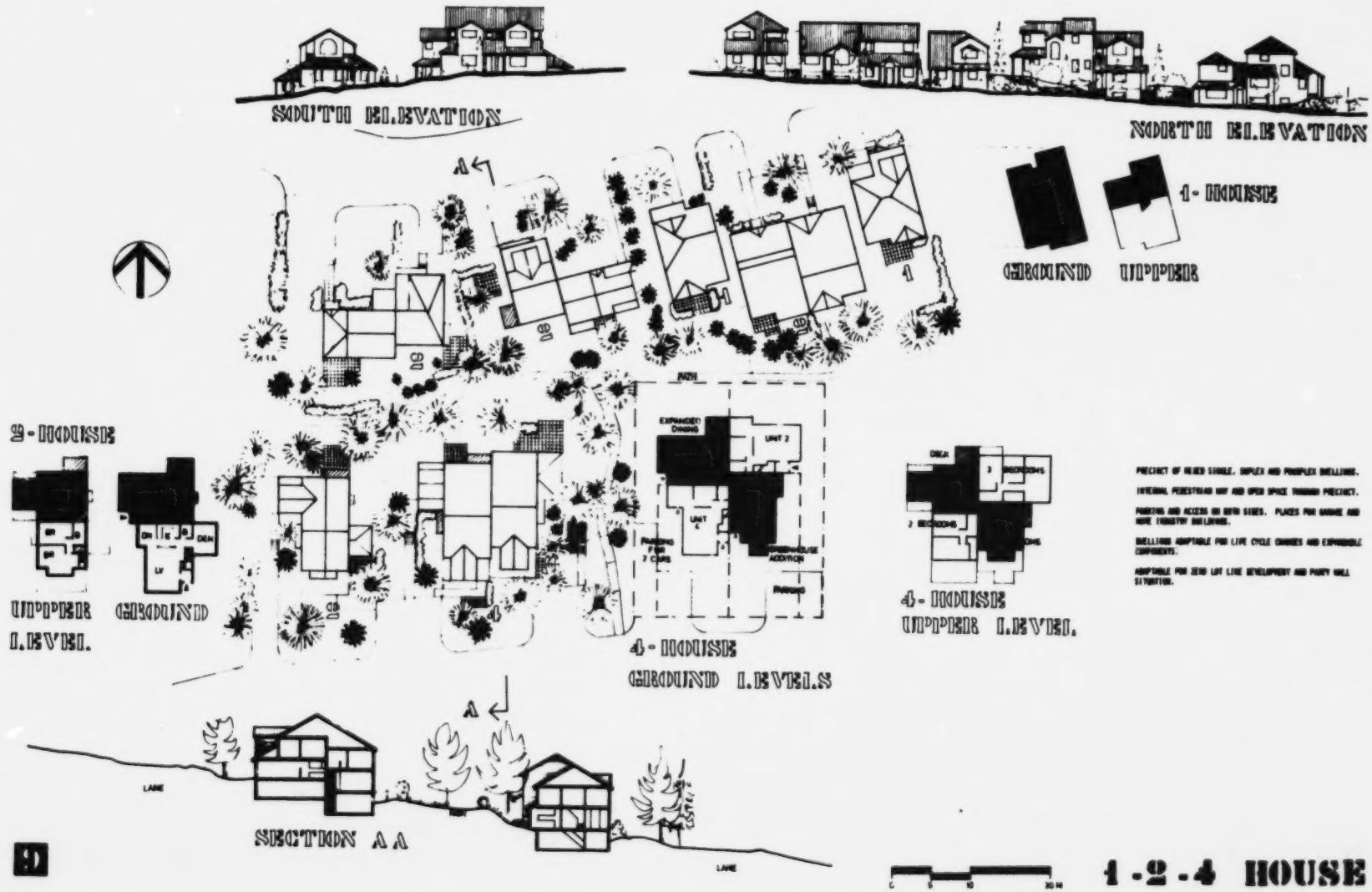
EACH UNIT IS PROVIDED WITH DUAL ACCESS, PRIMARY ACCESS BEING THROUGH COMMUNAL SPACES. SECONDARY ACCESS IS DIRECT FROM THE LIVING AREA TO THE PORCH AND OUTDOOR PRIVACY ZONE AND PORCH OF EACH DWELLING.

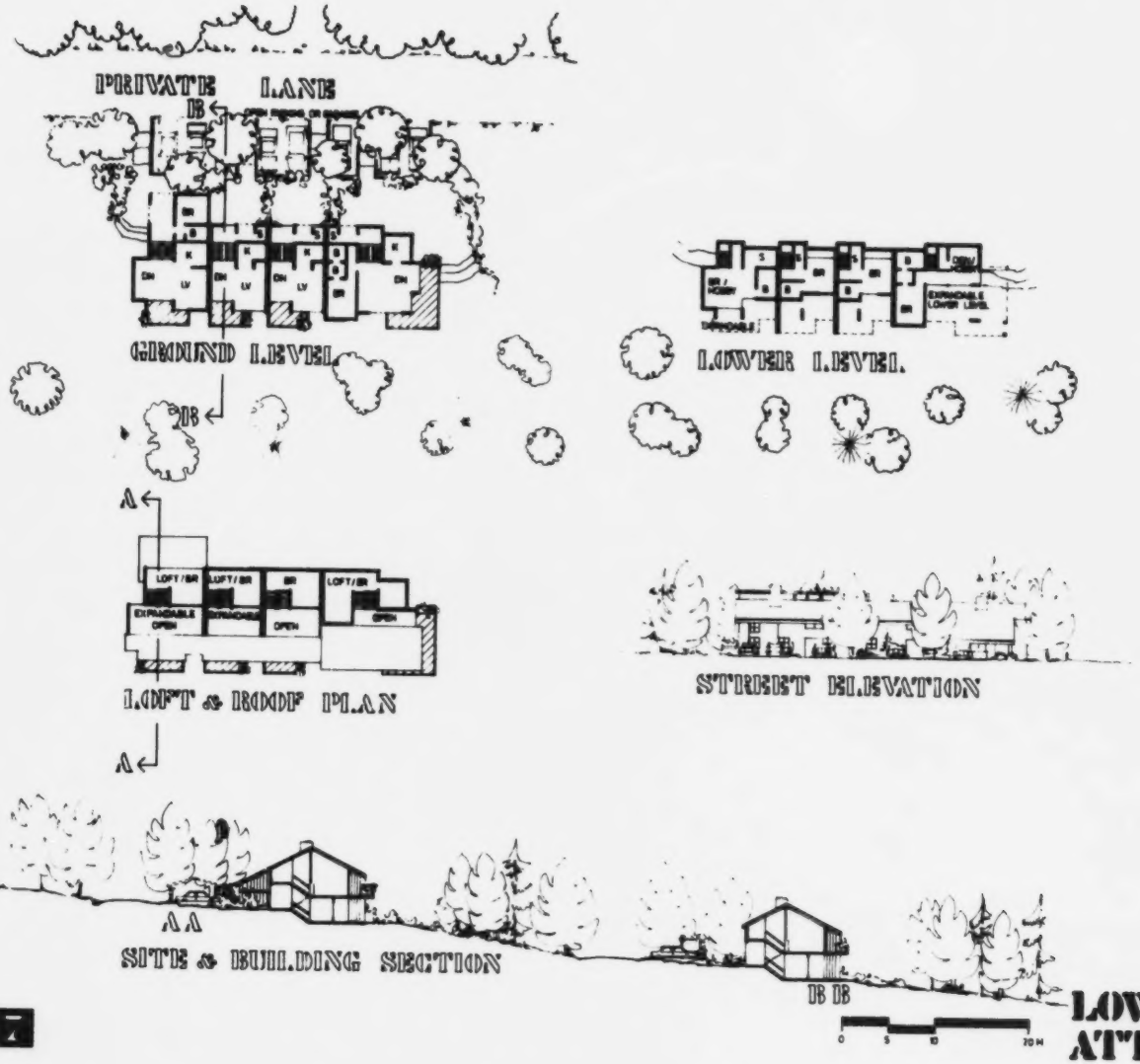
NOTE: REFER TO GRAPHICS ON SPACE DOME PLANNING ON OTHER SHEET.

LODGE AND SENIOR CITIZEN HOUSING



PLATFORM HOUSING


SOUTH ELEVATION
NORTH ELEVATION
1- HOUSE
GROUND
UPPER
2- HOUSE
UPPER
LEVEL
GROUND
4- HOUSE
GROUND LEVELS
4- HOUSE
UPPER LEVEL
SECTION AA
1-2-4 HOUSE



RELATIVELY LARGER SITE AREAS.

CENTRALIZED BANKS OF HOUSING.

RESTRICTIVELY RURAL.

SLOPE ADAPTIVE.

PRIVACY ZONE IN FRONT AND REAR.

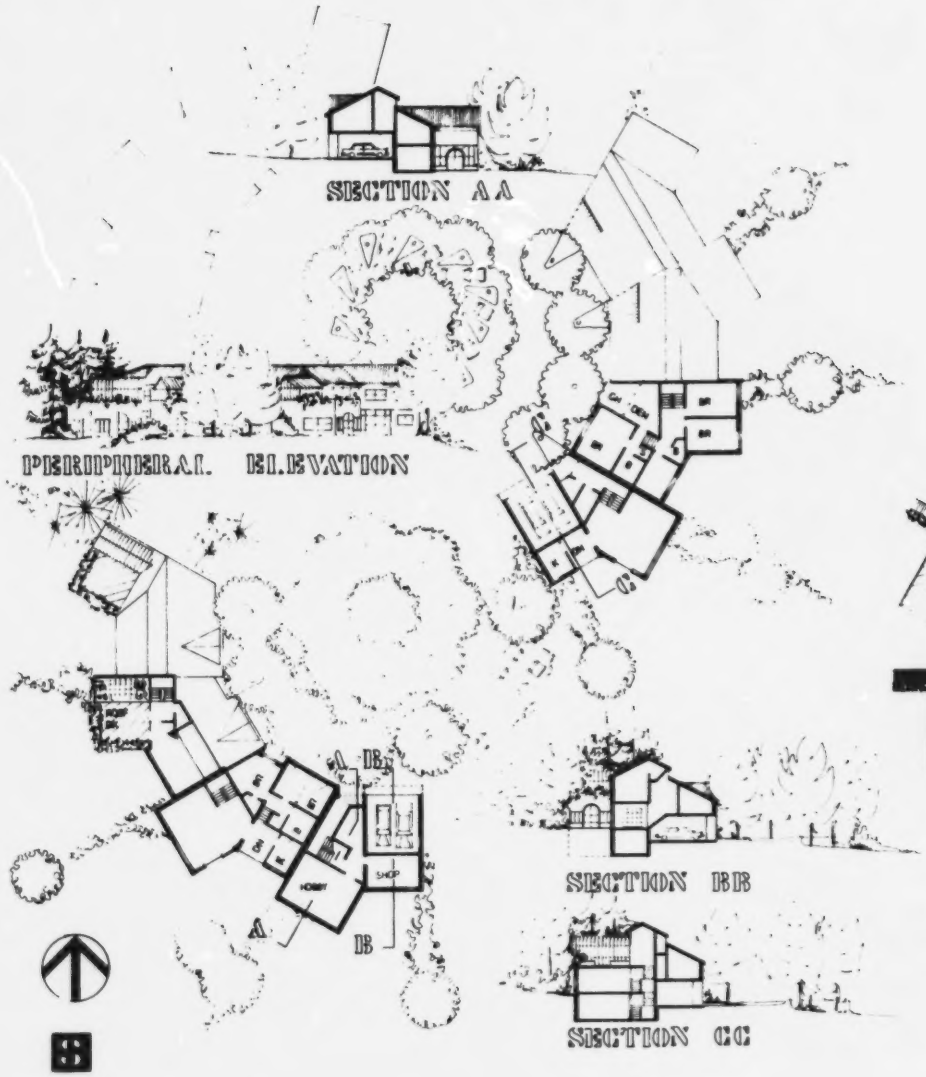
FLEXIBLE AND EXPANDABLE LOWER LEVEL AREAS.

LOFT AREA EXPANDABLE AND FLEXIBLE.

SURFACE PARKING, CAR ACCOMMODATE GARAGES.

LANE ACCESS, NO CARS ON OUTSIDE, NATURAL EDGES.

LOW PROFILE ATTACHED FAMILY HOMES



FAMILY DWELLING CLUSTERED AROUND A PAVED AND LANDSCAPED MEWS.

DWELLINGS ARE ADAPTABLE ON THE UPPER LEVELS FOR REVENUE LIVING SPACE WITH SHARED ACCESS, PARKING AND BASEMENT STORAGE AND WORK SPACE. UPPER DWELLINGS HAVE PRIVACY DECKS AND DIRECT ACCESS TO GROUND.

DWELLINGS ADAPTABLE FOR HOME INDUSTRY; SMALL SHOP, OFFICE, STUDIO.

BUILDING FORM BREAKS THE CONVENTIONAL LINEAR PATTERN.

RADIAL CLUSTERS GIVE EXTENSIVE EXTERIOR PRIVACY, ENSURE TO LARGE OPEN SPACES OR PERIPHERY FOR VIEW AND SUN EXPOSURE.

PRIVATE MEWS PERMITS DIRECT ACCESS TO GARAGE AND ENTRY - NO DWELLING SETBACKS REQUIRED.

NO FENCING REQUIRED; PRIVATE AMENITY AREAS SEPARATED BY LANDSCAPING AND ADJACENT DWELLING WALLS.

FLAT ROOF AREAS USABLE FOR FUTURE DECKS, GREENHOUSES, ADDITIONAL LIVING AND WORK SPACE.

ADAPTABLE FOR SMALLER IRREGULAR SITES.

CONVERSION FOR ADDITIONAL UPPER RENTAL SUITE

ADAPTABLE DWELLING CLUSTER

IBI GROUP

EDMONTON, ALBERTA

SECOND PLACE:
Land Use and Development

(from original jury comments)

The judges reviewed the Concept 2 (Modified) plans primarily.

The submission offered a variety of appealing land uses and flexibility to adjust to changes in the desires of market. As well, the open space system was advantageous. Concerns were expressed as to the servicing of downhill cul-de-sacs.

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

CALGARY HOUSING COMMISSION

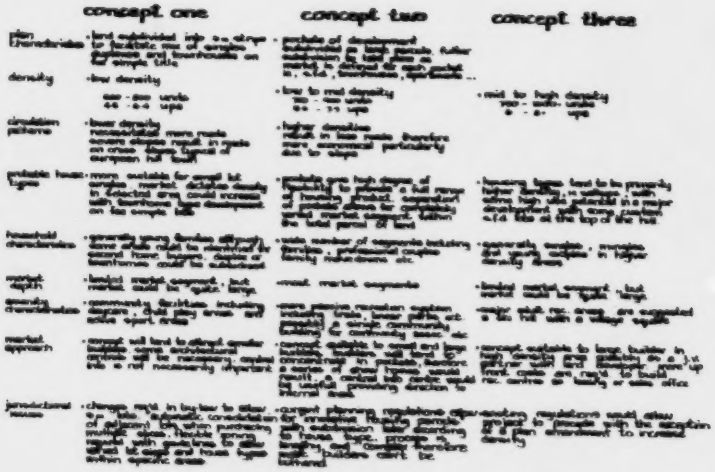
CMHA

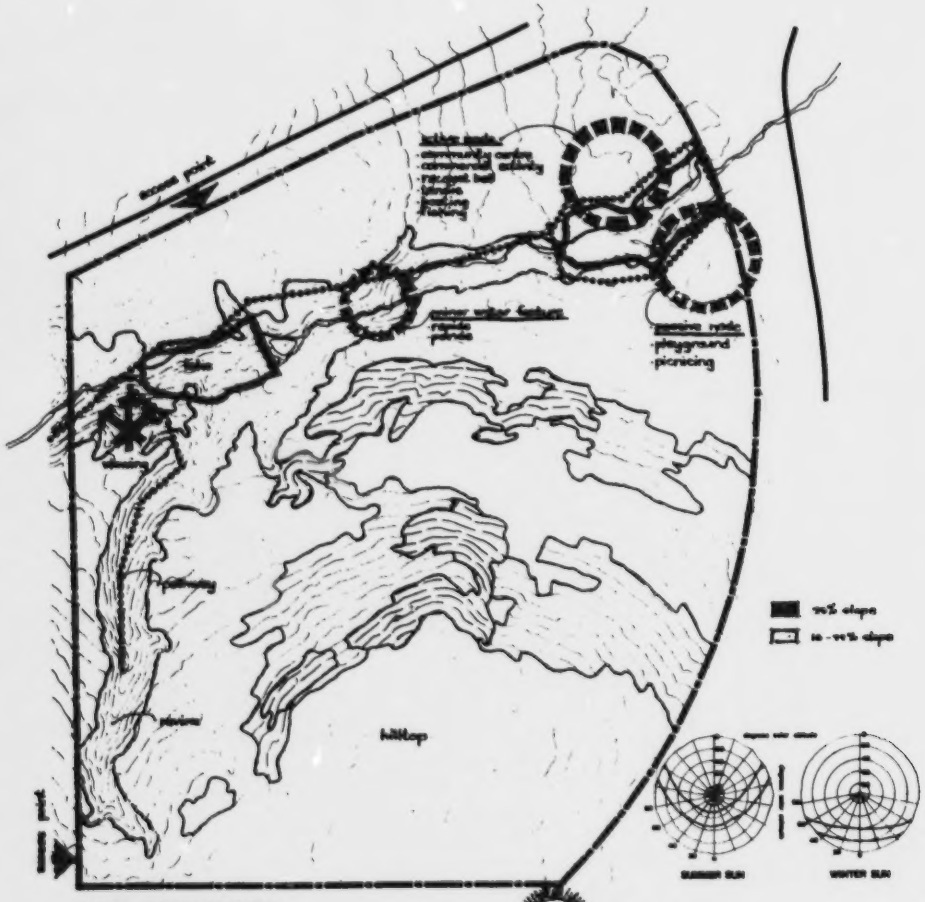
our submission demonstrates alternate land planning concepts with sufficient flexibility to respond to varied and as yet undetermined market conditions, while addressing the opportunities and constraints presented by the unique physical characteristics of the site.

three concepts are proposed ranging from a low density option consuming almost all the land for housing; to a cluster type concept balancing building area with a network of open spaces; to a concept that concentrates development while leaving major recreation open spaces. these concepts are illustrated only, and have therefore not been evaluated against the detailed engineering considerations necessitated by the site

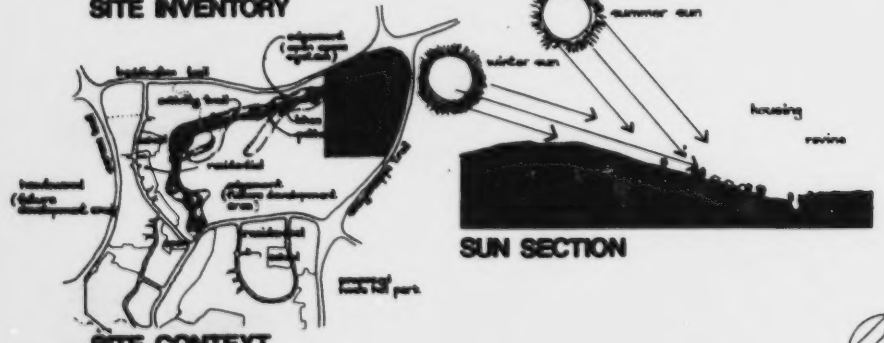
each concept lends itself to certain housing types, as different housing types are more suitable to different market segments, the characteristics of these segments in turn necessitate a range of merchandizing approaches, which also are reflected in the planning.

alternative concepts



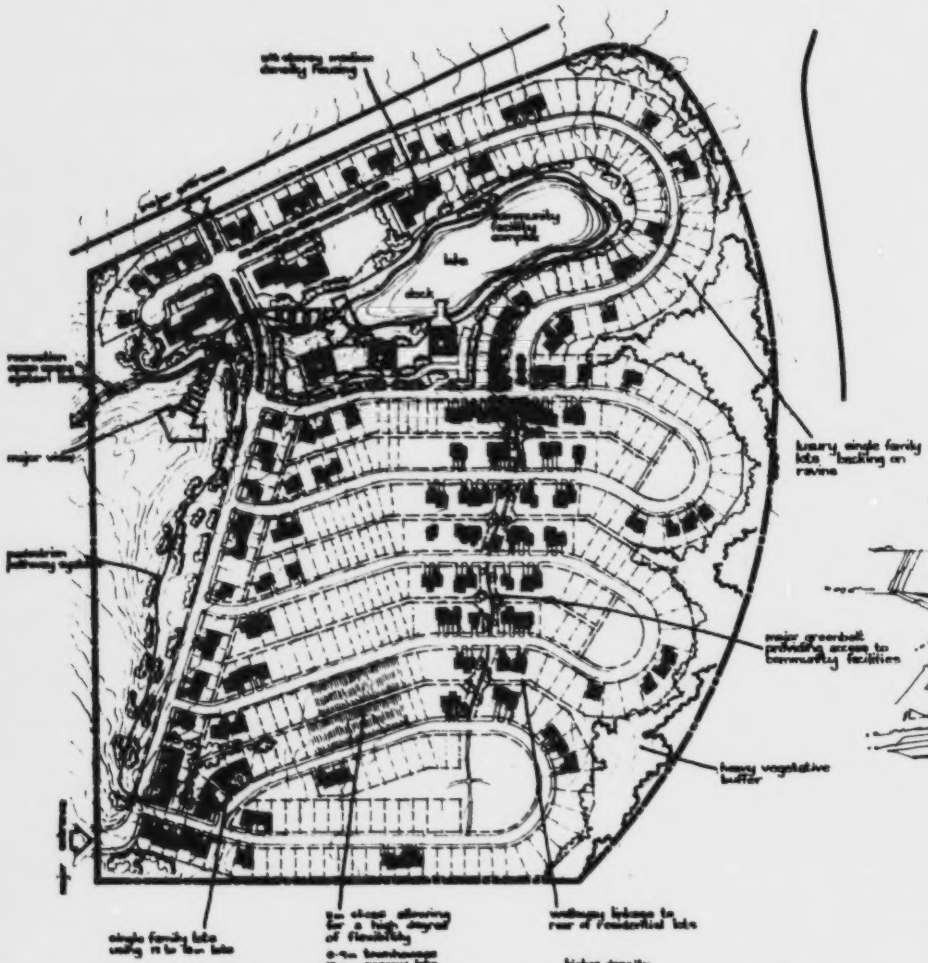


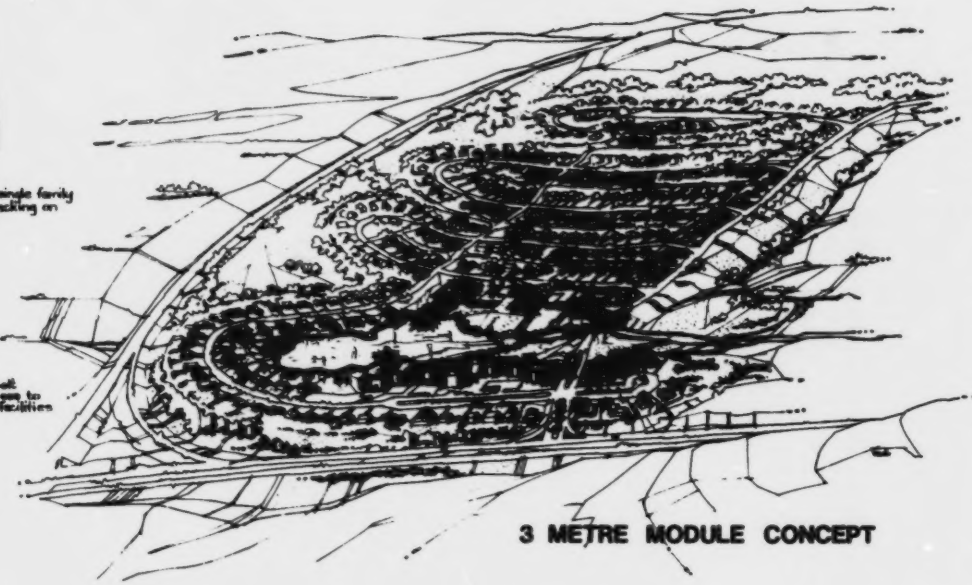
SITE INVENTORY



SITE CONTEXT

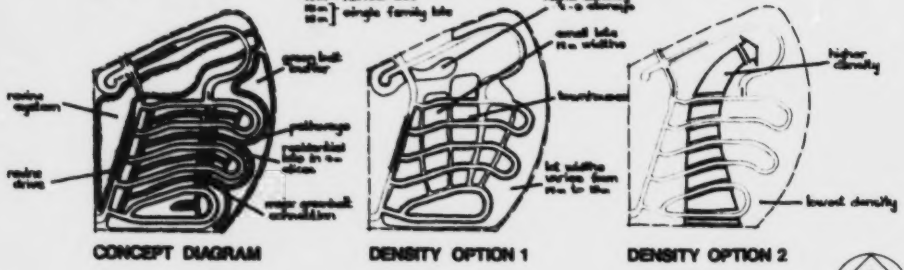
SUN SECTION





3 METRE MODULE CONCEPT

LAKESIDE
COMMUNITY CENTRE
& RAVINE

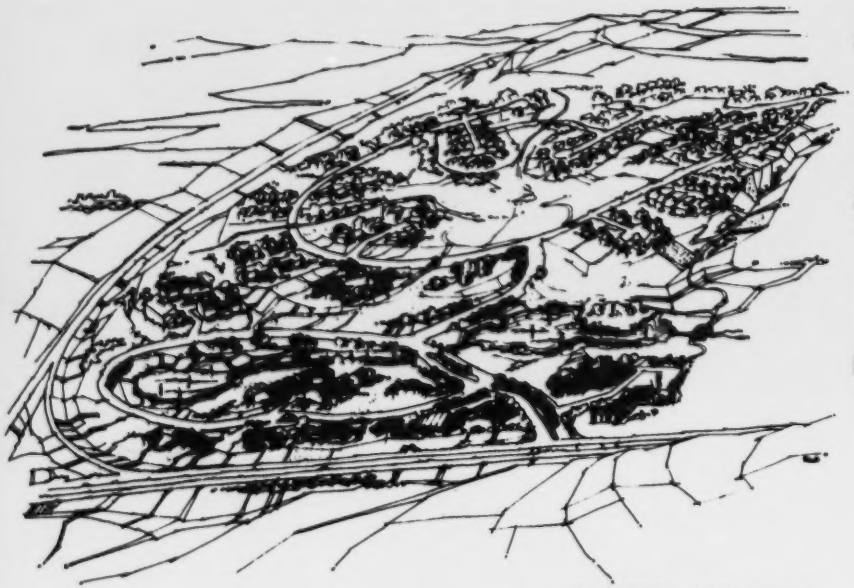


CONCEPT DIAGRAM

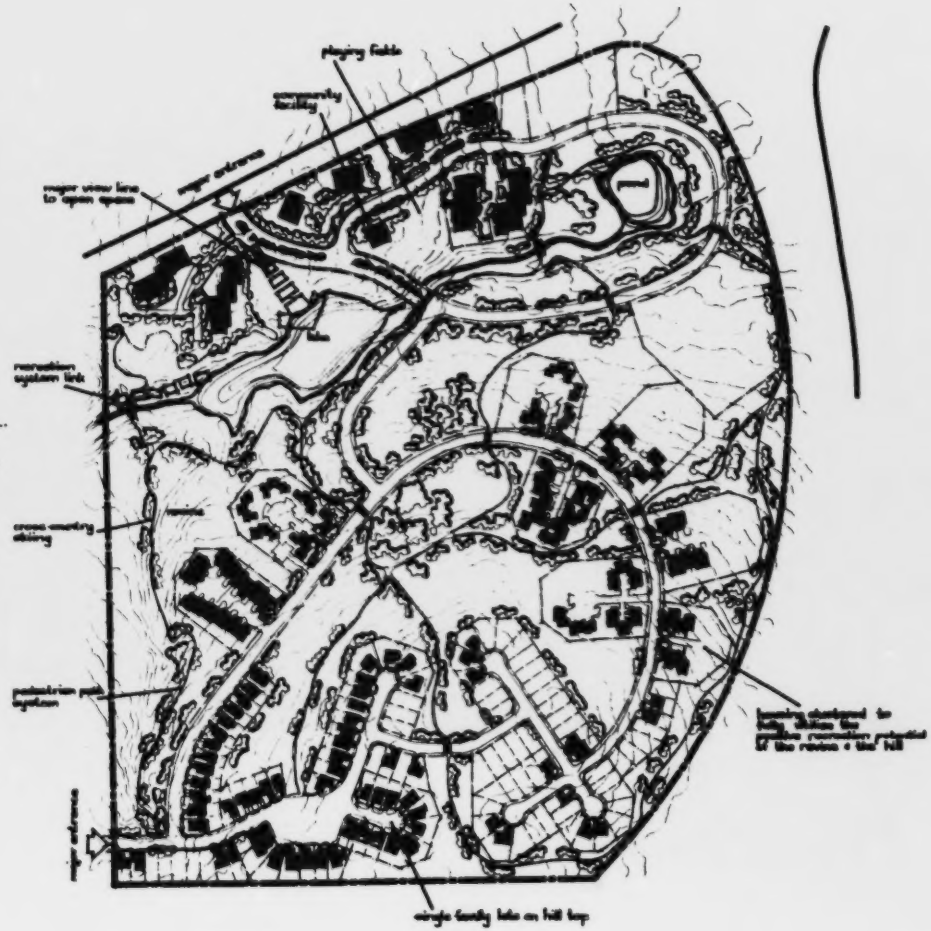
DENSITY OPTION 1

DENSITY OPTION 2

SITE CONCEPT 1 – 3 METRE MODULE

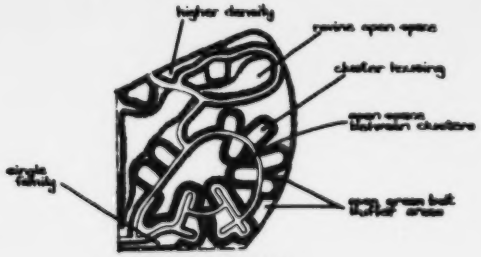


CLUSTER CONCEPT



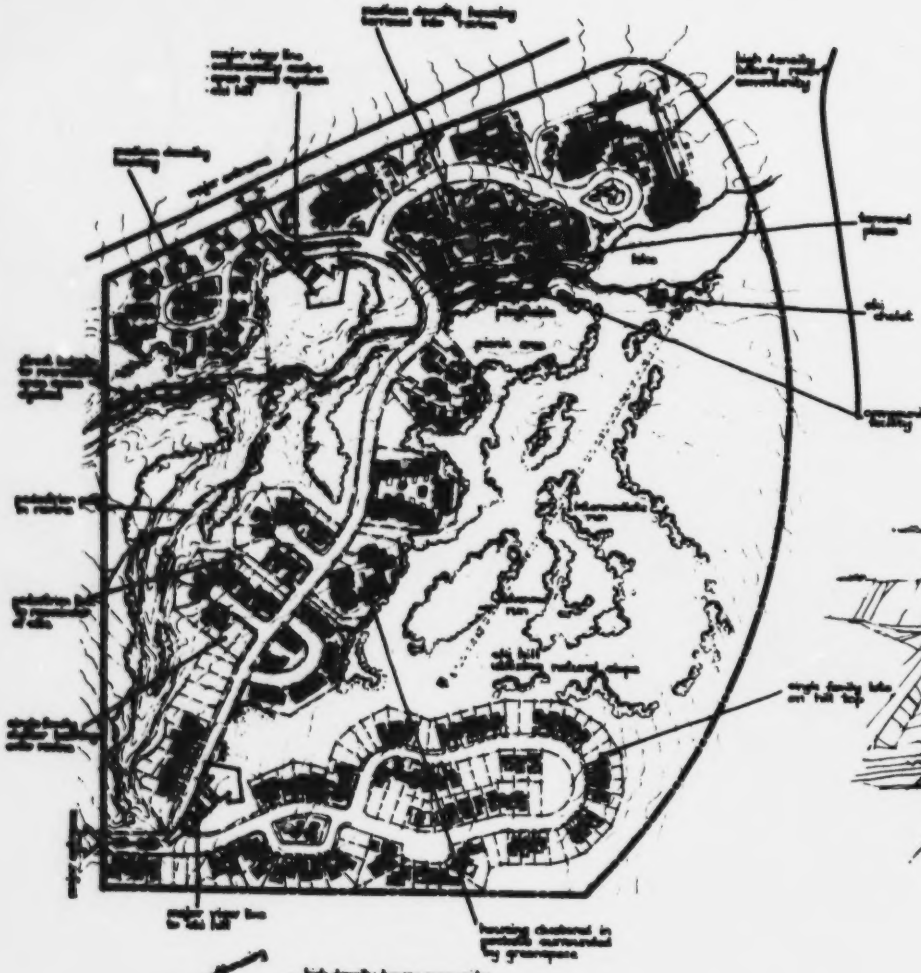
PATHWAY SYSTEM

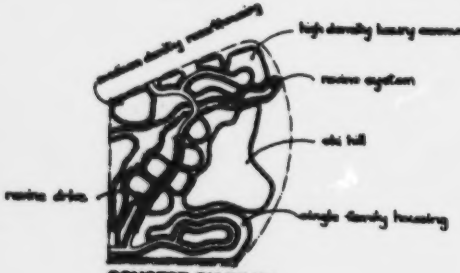
CLUSTER HOUSING



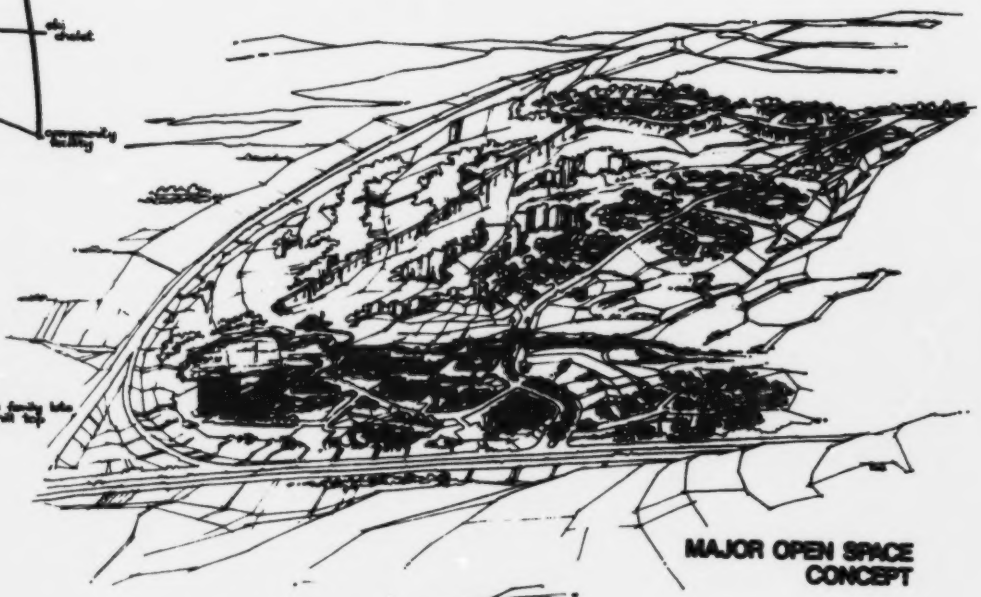
CONCEPT DIAGRAM

SITE CONCEPT 2 – CLUSTERS

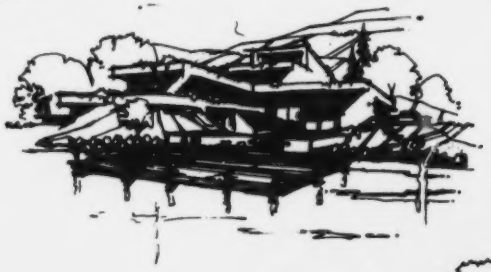




CONCEPT DIAGRAM



MAJOR OPEN SPACE CONCEPT



TERRACED HOUSING

ENTRANCE TREATMENT

SITE CONCEPT 3 – MAXIUM OPEN SPACE

HOUSING FORM

FIRST PRIZE: Barry Pendergast Architect Ltd.
SECOND PRIZE: Jack Long + the New Street Group

BARRY PENDERGAST ARCHITECT LTD.

FIRST PRIZE: **CALGARY, ALBERTA**

Housing Form

(original jury comments)

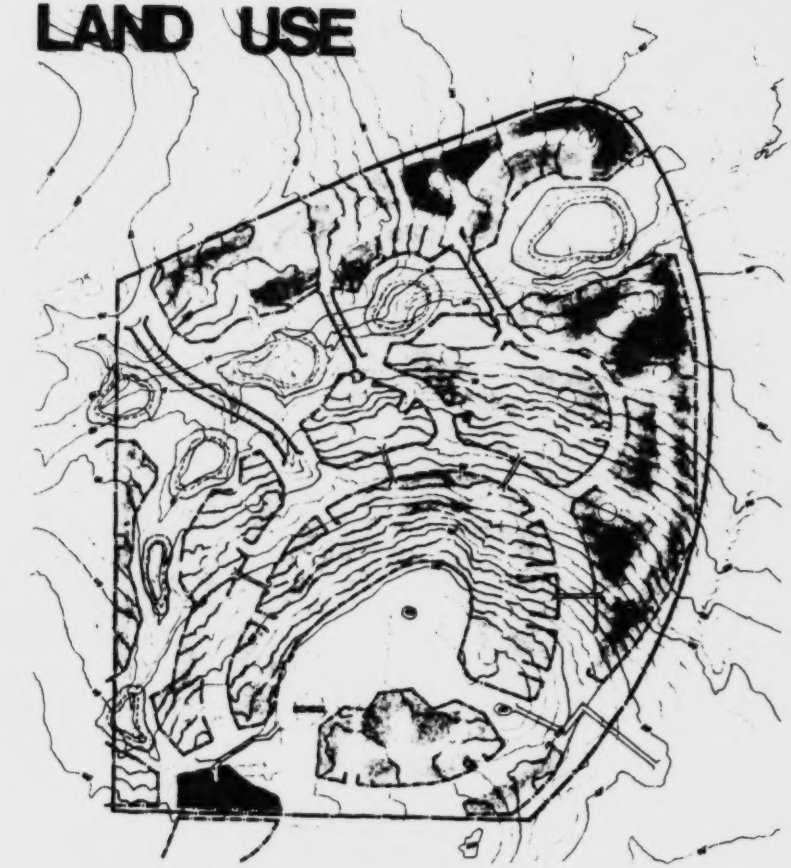
The submission offered ingenuity in its housing forms, the modesty of the cost, the lack of complexity to produce it. The ability to further adapt to evident design problems and market changes, and the passive nature of energy conservation also met a very real challenge. The land use in the form of cells provides alternative form of development and the placement and orientation of the park area enhances its future use. The submission must address in its refinement concerns such as the buyer acceptance of co-ownership, the costs of perhaps an overabundance of bridges & water areas, grades of various roads, and the speed and noise from certain roads.

L. Guyn:
How well would co-op and tri homes be accepted? I question whether a builder would be prepared to put anything into such a project. It is visionary, not overly practical, the graphics are very well handled and a good deal of effort has gone into preparation of submission.

R. Kinney:
There is a precedent to this scheme in Anaheim, California.

B. Norton:
The fee simple cluster is too much of a compromise to the Calgary desire for no common walls. The graphics are excellent for 8½ x 11 reductions, and are very readable by the lay person.

G. Steber:
I liked the co-home concept welded with other forms of housing and ownership. The economics of units and opportunity for improvements are desirable. Good sense of community in clusters and variations on groupings of different size units. Responds to need for more modest size lots with more privacy than conventional lots.



INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

1

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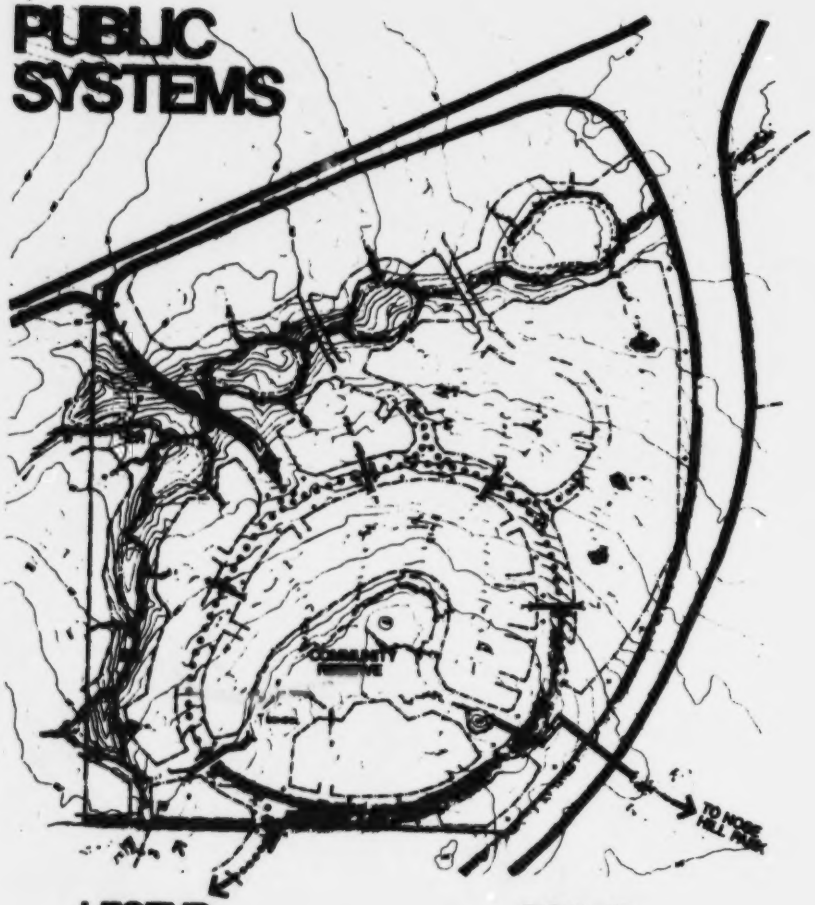
PUBLIC SYSTEMS



LEGEND

- COLLECTOR (PRIMARY)
- RESIDENTIAL STREET
- LANE
- BRIDGE
- PUBLIC WALKWAY
- PUBLIC TRANSIT
- STORM RETENTION 100 YEAR FLOOD PERMANENT WATER
- NO FRONTAGE ACCESS FROM STREETS

ROADS

- COLLECTOR
- BRIDGE SECTION
- COLLECTOR
- RESIDENTIAL STREETS
- BRIDGES
- LANES
- USABLE STREET FRONTAGE

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

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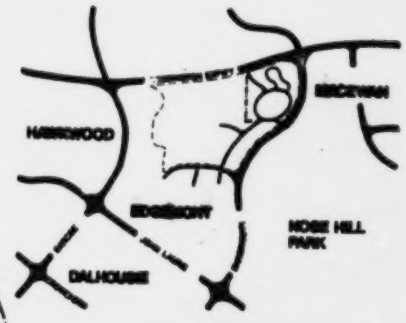
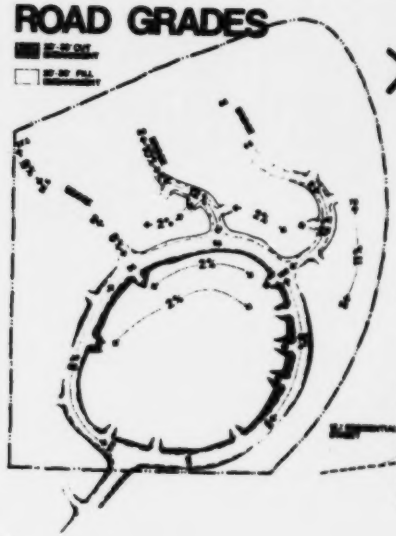
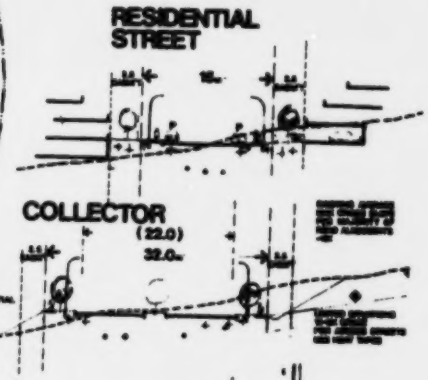
SITE PLAN INFO



ROAD GRADES





VIEW SOUTH

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

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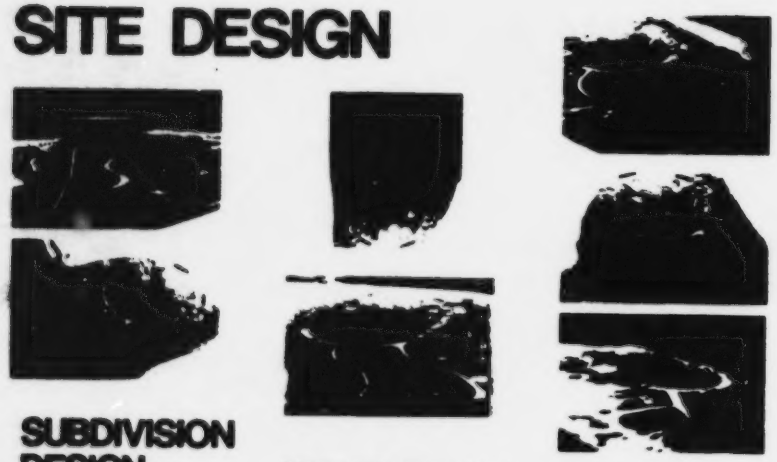
SITE DESIGN



SUBDIVISION DESIGN

GENERAL OBJECTIVES

1 AFFORDABLE UNITS ON CHALLENGING SITE BY EFFICIENT LANDUSE, SMALL UNIT SIZE, CO-HOME OWNERSHIP.
2 MATCH EXTRA ENGINEERING COSTS BY 30 PPA USING SLOPE & OPEN SPACE TO MINIMIZE IMPACTS.
3 USE LOWER OCCUPANCY DESPITE PLUSAGE FROM CO-HOMES (3-35 PPU).
4 REDUCE LAND WASTAGE BY SMALL SETBACKS, MIN YARDS, NO LANES, CLUSTER CUL-DE-SAC LAYOUTS.
5 SHOW HIGHER DESITY & LOW SCALE FOR POSSIBLE LEGISLATION CHANGES.
6 PRESERVE HILLTOP & RAVINES FOR HIGH PROFILE OPEN SPACE.
7 USE SHARED SERVICES APPROACH FOR GROUPS OF UNITS.
8 CONCENTRATE MD RES. ON STEEPER SLOPES WHERE GARAGE/UNIT SEPARATION INEVITABLE.

ENVIRONMENTAL RESERVE

1 MAXIMIZE USE OF THIN STRIP BY DISTRIBUTING STORM RETENTION TO FORM SHALLOW LAKE SYSTEM.

PUBLIC OPEN SPACE

1 SMALL AREAS DISTRIBUTED IN LD & MD AREA. MAX CONCENTRATED FOR USEFULLNESS, CLOSE TO HOME AND FOR VIEWS & CONNECTIONS.

ROADS

1 DESIGN TO NORMAL GRADES. INEVITABLE STEEP SLOPES LIMITED TO SPECIFIC LOCATIONS FOR TECHNICAL ANSWER (HEAT TAPES).
2 ACCEPT INSIDE CURVE JUNCTIONS AND STOP SIGHT DISTANCE PROBLEM AT SIMILAR LOC TO STEEP GRADES.
3 NO LANES - SAVES LAND AND GRADING PROBLEMS.
4 PARKING WITHIN ROW.
5 SIGNIFICANT PED/AUTO SEGREGT'N.

LOW DENSITY RES. (LD)

1 25' LOTS INCREASE LD DENSITY TO REDUCE MD DENSITY WITHIN OVERALL 30 PPA (SCENARIO B).
2 CLUSTER CUL DE SAC LAYOUTS SAVE LAND & GIVE COURTYARD PRIVACY.
3 SMALL PRIVATE OPEN SPACES PER LOT. SMALL GROUPS OF HOMES CENTRE ON SMALL COMMUNITY RESERVE.

MEDIUM DENSITY RES. (MD)

1 UNITS TO HAVE ACCESS & PRIVATE OPEN SPACE AT GRADE AND MODIFIED GRADE.
2 2-STOREY MAX TO MINIMIZE WINTER SHADOW BUT ALSO SHIELD FROM NORTH WIND.
3 25 UPA ACHIEVABLE WITH STEPPED TOWNHOUSING. CLUSTER UNITS YIELD SLIGHTLY LESS.
4 UNIT GROUPS CENTRED ROUND PUBLIC SPACE (OPEN/HOT TUB/BBQ).

CO-HOME UNITS

- 25% OF ALL LD & MD UNITS.
- ONE TRI-HOME PER 6 CO-HOMES.
- NO SPECIAL LAND USE CLASSIFICATION REQUIRED.

COMMERCIAL CENTRE

1 SHARED USE SHOPPING / SCHOOL / SENIOR CITIZENS ADJACENT TO PLAYING FIELDS AND OPEN SPACE SYSTEMS.

POPULATION & DENSITY

L.D. NET SITE AREA	[illegible] AC.
INC. SOME PUBLIC OPEN AREA	
MD. NET SITE AREA	[illegible] AC.
PROPOSED OVERALL DENSITY	[illegible] PPA.
TOTAL POPULATION	[illegible]
USABLE L.D. FRONTAGE	[illegible]
L.D. AREA RAU	[illegible]
MD. AREA RAU	[illegible]

SCENARIO A 45' WIDE LOTS ON L.D. AREA 32.4 U.P.A. ON M.D. AREA (NET)	
TOTAL L.D. UNITS	[illegible]
TOTAL L.D. POPULATION	[illegible]
TOTAL M.D. UNITS	[illegible]
TOTAL M.D. POPULATION	[illegible]
TOTAL CO-HOME UNITS	[illegible]

SCENARIO B (AS ILLUSTRATED) 25' WIDE LOTS ON L.D. AREA 25.3 U.P.A. ON M.D. AREA (NET)	
TOTAL L.D. UNITS	[illegible]
TOTAL L.D. POPULATION	[illegible]
TOTAL M.D. UNITS	[illegible]
TOTAL M.D. POPULATION	[illegible]
TOTAL CO-HOME UNITS	[illegible]

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

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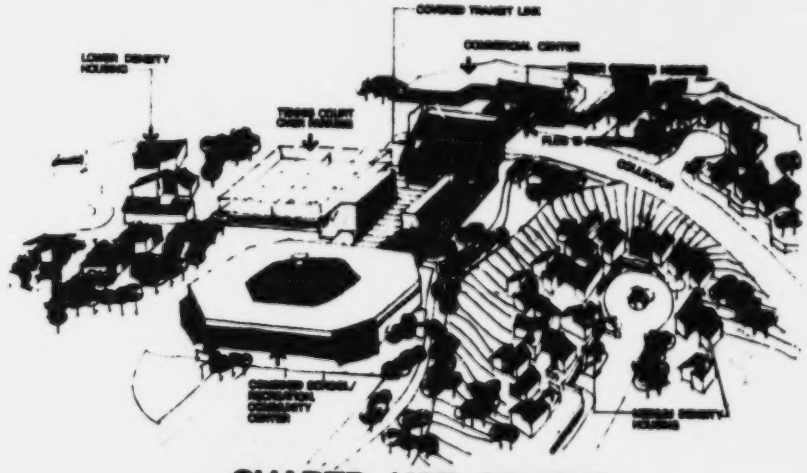
IMAGES

STORM RETENTION LAKE / RECREATION SYSTEM



SHARED USE CENTRE

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

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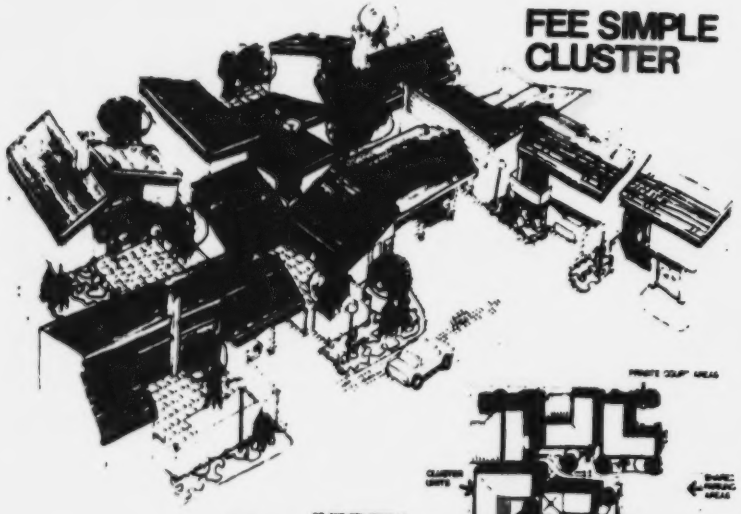
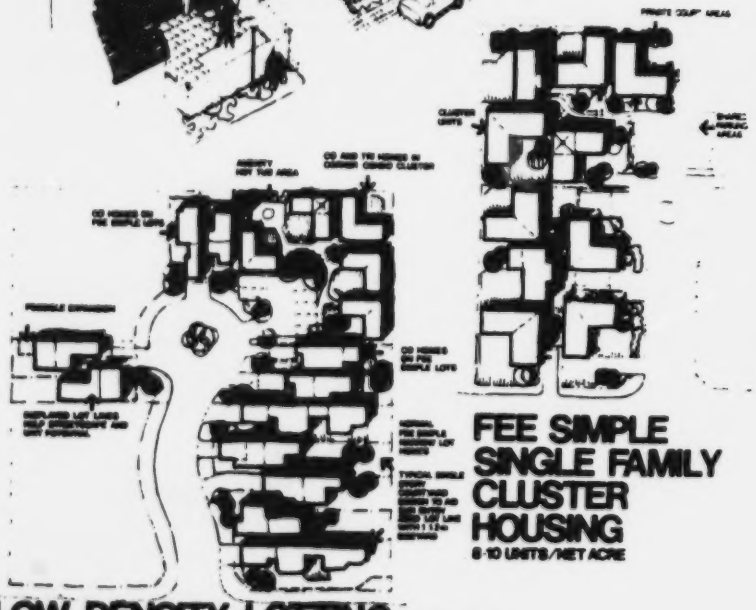
LOWER DENSITY



FEE SIMPLE CLUSTER



FEE SIMPLE SINGLE FAMILY CLUSTER HOUSING

8-10 UNITS/NET ACRE

LOW DENSITY LOTTING 8-10 UNITS/ACRE

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

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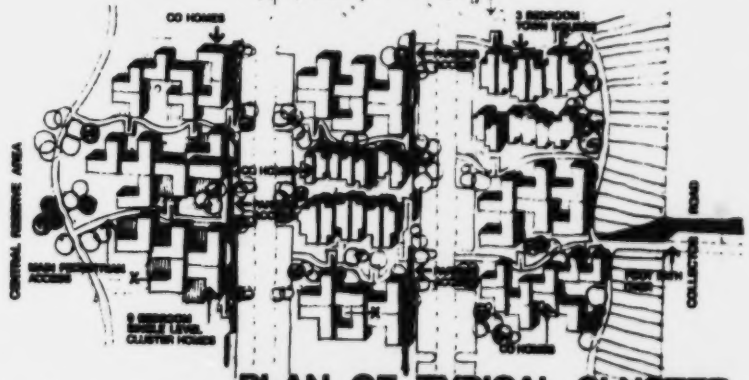
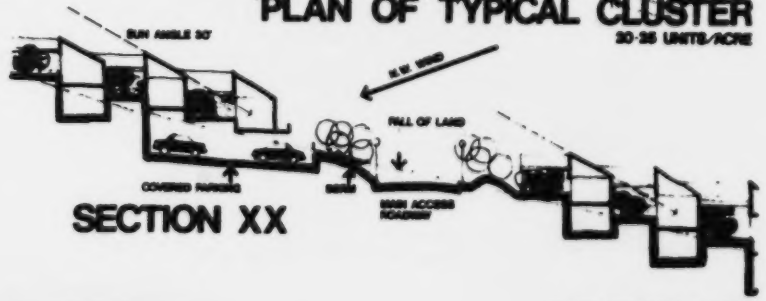
MEDIUM DENSITY

AERIAL SKETCH



PLAN OF TYPICAL CLUSTER

20-25 UNITS/ACRE



SECTION XX

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

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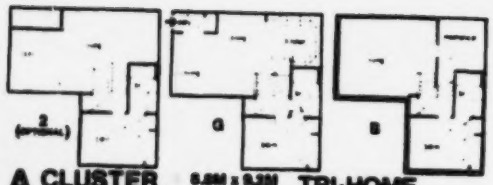
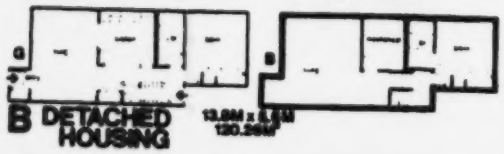
01010

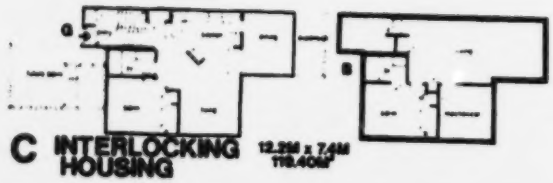
CO-HOME PLANS



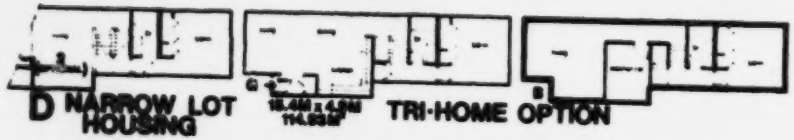
A CLUSTER HOUSING — TRI-HOME OPTION



B DETACHED HOUSING

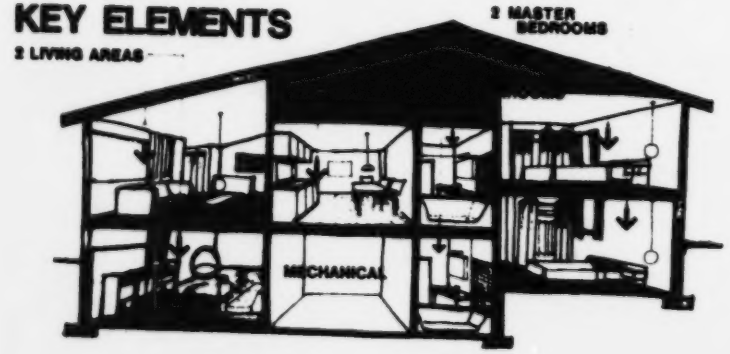


C INTERLOCKING HOUSING



D NARROW LOT HOUSING — TRI-HOME OPTION

KEY ELEMENTS



INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

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CO - HOMES

OBJECTIVES

1. STARTER HOME OWNERSHIP AT AFFORDABLE PRICE
2. SUPPLY DEMAND FOR INDEPENDANT COHABITATION AND OWNERSHIP DUE TO CHANGING FAMILY FORMATIONS
3. PROVIDE AFFORDABLE HOUSING WITHOUT GOVERNMENT SUBSIDY
4. ACHIEVE EFFICIENT LAND USE

TARGET MARKET

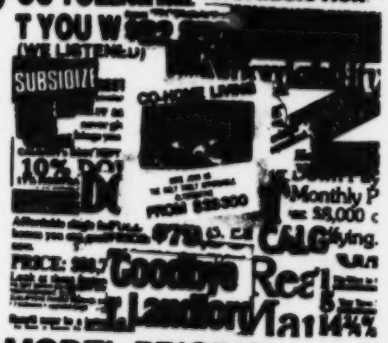
- YOUNG UNMARRIED RENTERS UNABLE TO QUALIFY
- SINGLE PARENTS UNABLE TO AFFORD CONVENTIONAL HOUSING BUT WANTING SHARED BABYSITTING/OTHER DUTIES
- DIVORCED/SEPARATED SINGLES LEFT WITH ONLY HALF REQUIRED EQUITY
- RETIRED/ELDERLY REQUIRING LIFESTYLE INBETWEEN SINGLE FAMILY HOUSE AND COMMUNAL SENIOR CITIZENS HOME
- COUPLES REQUIRING STARTER HOME BUT WITH LESS THAN HALF REQUIRED EQUITY
- INDIVIDUALS PURSUING PERMANENT SINGLE LIFESTYLE, REQUIRING HOME OWNERSHIP BUT UNABLE TO AFFORD/JUSTIFY CONVENTIONAL HOME
- PROSPECTIVE HOME OWNERS LOOKING FOR GOOD VALUE
- SMALL INVESTORS IN RENTAL PROPERTIES

KEY FEATURES

- 2 MASTER BEDROOMS
- 2 PRIVATE FULL 4-PIECE BATHROOMS
- 2 REFRIGERATORS
- 2 LIVING AREAS
- LARGER KITCHEN CUPBOARDS, CLOSET, STORAGE

WHAT IS A CO-HOME?

1. EITHER A DETACHED OR ATTACHED TOWNHOUSE
2. CONVENTIONAL HOME DESIGNED FOR 2 INDIVIDUALS /FAMILIES TO COHABIT INDEPENDANTLY
3. SMALLER BUNGALOW WITH FULLY DEVELOPED BASEMENT



MODEL PRICING

TOWNHOUSES	SQ. FEET	PER UNIT	PER BUYER
STARTER CO-HOME	1050	$ 59 900	$ 29 950
STARTER TRI-HOME	1400	$ 69 950	$ 23 300
MID CO-HOME	1350	$ 79 900	$ 39 950
MID TRI-HOME	1850	$ 94 950	$ 31 650
LUXURY CO-HOME	1650	$ 99 900	$ 49 950
LUXURY TRI-HOME	2150	$114 950	$ 38 300
DETACHED HOUSING			
STARTER CO-HOME	950	$ 69 900	$ 34 950
STARTER TRI-HOME	1350	$ 84 950	$ 28 300
BASIC CO-HOME	1100	$ 79 900	$ 39 950
BASIC TRI-HOME	1550	$ 94 950	$ 31 650
MID CO-HOME	1150	$ 89 900	$ 44 950
MID TRI-HOME	1700	$109 950	$ 36 650
LUXURY CO-HOME	1350	$109 900	$ 54 950
LUXURY TRI-HOME	2000	$134 950	$ 44 950
BASIC DUADRA-HOME	1700	$ 99 800	$ 24 950

WHAT IS A TRI-HOME?

- IDENTICAL IN CONCEPT TO CO-HOME BUT DESIGNED FOR INDEPENDANT COHABITATION BY 3 PEOPLE

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

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TECHNICAL

FIRST PRIZE: Tritek Engineering Ltd., R. Waring
SECOND PRIZE: Stanley Associates Engineering Ltd., Greg Brown

TRITEK ENGINEERING

CALGARY, ALBERTA

FIRST PRIZE: Technical

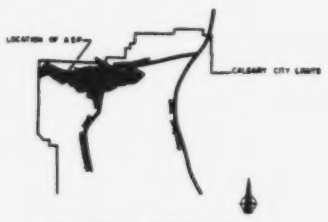
L. Guyn:
This proposal would have far greater potential on a relatively flat site, however, is not very practical on a hilly site such as this offers. How would back lots be serviced on downhill side? It would be practical if well controlled during design and construction.

P. Hemingway:
A serious attempt to deal with technical problems of subdivision design. Other aspects of the problem (ie. social) are overlooked.

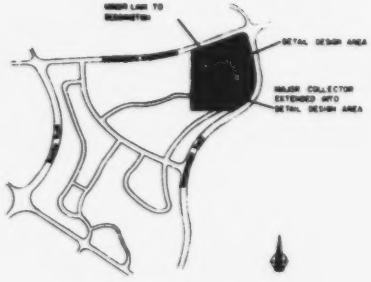
B. Norton:
Basic idea is carried through fairly completely. Flag lots are an interesting possibility to increase unit usage of expensive roads and servicing.

B. Pendergast:
This is not new but should be encouraged on a wider scale by City Hall. As drawn it comes over as a very rigid concept — would need to be combined with other ideas especially relating to a more freed up subdivision concept. A major advantage of the proposal is the adressing of higher density without visual impact to street.

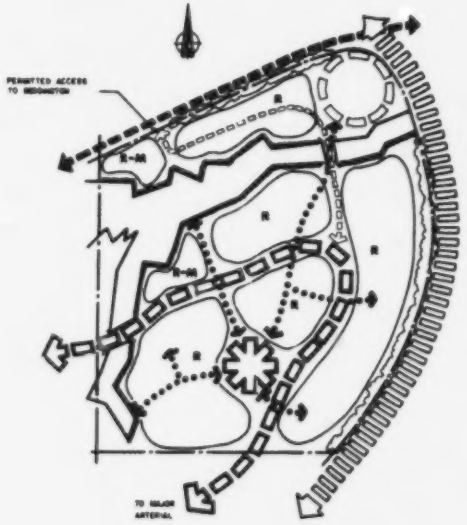
G. Steber:
There are economies here to be realized. Application to a complete subdivision cuts down on variety of forms/densities of housing. There are some precedents in Calgary along the Bow.



● LOCATION OF STUDY AREA
Not To Scale



REVISED A.S.P. CONCEPT
Not To Scale



DEVELOPMENT CONCEPT
Not To Scale

LEGEND

- EXPRESSWAY
- ARTERIAL
- COLLECTOR
- MINOR LINK
- STORMWATER LAKE
- BUFFER
- ELEMENTARY SCHOOL
- RAVINE SETBACK
- RAVINE CROSSING
- R — SINGLE FAMILY DWELLINGS
- R-M — MULTI-FAMILY DWELLINGS
- PEDESTRIAN LINK
- RAVINE (E.R.)
- PROPERTY LINE

CALGARY INNOVATIVE DESIGN COMPETITION
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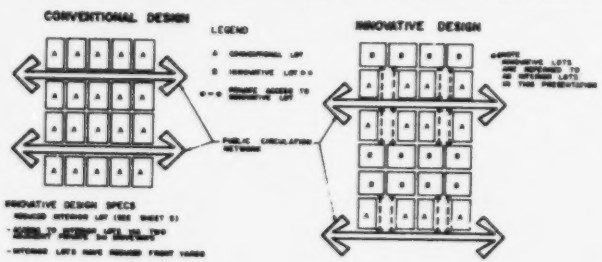
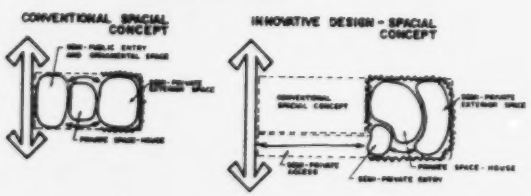
Drawing 1 of 6

INNOVATIVE SUBDIVISION DESIGN CONCEPT



SPACIAL RELATIONSHIPS



GENERAL CONCEPT FEATURES

- DEVELOPMENT COST SAVINGS (SEE ECONOMIC BENEFITS-THIS SHEET)
- REDUCTION OF LAND DEDICATED FOR ROAD R/W
- INCREASE IN PERCENTAGE OF LAND SOLD
- REDUCTION OF MAINTENANCE AND OPERATION COSTS FOR
  - STREET MAINTENANCE
  - SNOW REMOVAL
  - GARBAGE COLLECTION
  - MAIL DELIVERY
- POTENTIAL COST SAVING FOR INTERIOR UNIT CONSTRUCTION
- INCREASED PRIVACY FOR INTERIOR LOTS
- CONCEPT FLEXIBILITY FOR APPLICATION TO DETACHED AND SEMI-DETACHED HOUSING FORMS
- PROVISION OF A LARGE PERCENTAGE OF CONVENTIONAL LOTS AT REDUCED COST
- ALL LOT SERVICES ARE BASED ON CONVENTIONAL CONSTRUCTION STANDARDS

SPECIAL FEATURES CALGARY PLAN

- REDUCTION OF ROAD R/W TO 11.9% OF DEVELOPABLE AREA
- NO ACCESS TO INTERIOR LOTS FROM COLLECTOR ROADWAY
- INTERIOR LOTS ONLY ON UP-SLOPE SIDE OF ROADS (EXCEPT ADJACENT TO RUNNELS) TO MINIMIZE VEHICLES BEING STUCK AT BOTTOM OF DRIVEWAYS UNDER ICY CONDITIONS
- FULL UTILIZATION OF CONCEPT HAS BEEN LIMITED DUE TO SITE CONSTRAINTS
- UNIT GENERATION, BASED ON LAND USE IDENTIFIED ON SHEET 3, IS

CONVENTIONAL LOTS	193	24.5%
INTERIOR LOTS	480	59.7%
MULTIPLE UNITS	121	15.5%
TOTAL	785	100%

CALGARY APPROVALS

- INITIAL PROJECT COULD PROCEED IN CALGARY UNDER THE DC LAND USE DISTRICT
- FUTURE DEVELOPMENT APPROVALS SHOULD OCCUR ON THE BASIS OF A NEW DISTRICT DESIGNATION WITHIN THE LAND USE BY-LAW

CONFORMANCE TO LAND USE BY-LAW

- THIS CONCEPT QUALIFIES UNDER ALL PROVISIONS OF THE CALGARY LAND USE BY-LAW EXCEPT FOR THE DEFINITION OF LOT WIDTH. THE NON-CONFORMANCE RESULTS FROM THE REFERENCE TO STREET FRONTAGE IN THE DEFINITION

FIRE PROTECTION

- ADEQUATE ACCESS TO THE INTERIOR LOTS FOR FIRE PROTECTION IS ENSURED THROUGH THE PROVISION OF TWO ADJACENT PRIVATE DRIVEWAYS WHICH PROVIDE A MINIMUM OF A 6m UNOBSTRUCTED CORRIDOR TO THE INTERIOR LOTS

COST BENEFITS

- VALUE OF LOTS FOR A CONVENTIONAL SUBDIVISION DESIGN (SHEET 6) BASED ON $45,000/LOT = $ 35,550,000
- LESS SERVICING COST SAVINGS OF INNOVATIVE DESIGN (SHEET 6) = $ 921,000

EQUALS $32,629,000

- MARKET VALUE OF LOTS FOR INNOVATIVE DESIGN (ASSUMING SAME PROFIT) $32,629,000 ÷ 664 = $49,140/LOT
- MINIMUM POTENTIAL SAVINGS TO HOME OWNER $45,000 - $49,140 = * $5,860/LOT

* NOTE

ADDITIONAL SAVINGS PER LOT, MAY OCCUR IF CARRYING CHARGES, DUE TO REDUCED CONSTRUCTION COSTS, AND OTHER FACTORS SUCH AS CONTINGENCY ALLOWANCES, PROFIT PERCENTAGE, ETC ARE ACCORDINGLY ADJUSTED

CALGARY INNOVATIVE DESIGN COMPETITION

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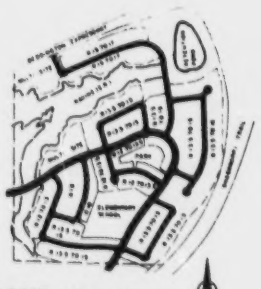
Drawing 2 of 6

PLAN OF SUBDIVISION
Scale 1:2000

NOTE - CUT & FILL AREAS ARE NOT IDENTIFIED FOR THE PURPOSE OF CLARITY. THESE AREAS ARE TO BE CUT & FILLED TO ACCOMODATE THE MAXIMUM SLOPES FOR ROADWAYS.



LAND USE MAP
N.T.S.

- R123 TO 15 DENOTES LOT FRONTAGE

LAND USE TABLE

DEVELOPABLE LAND	ha.	# units	%
SINGLE FAMILY DETACHED	33.40	664	44.5
MULTI-FAMILY SITES	3.49	121	4.6
PARK (M.R.)	1.18	—	1.6
ROADS	8.91	—	11.9
SCHOOL SITE	3.76	—	5.0
sub total	50.7 ha		67.6 %

UNDEVELOPABLE LAND			
RAVINE (E.R.)	9.14		12.2
RETENTION POND	3.57		4.7
①BUFFERS / SETBACKS	11.60		15.5
sub total	24.3 ha		32.4 %

TOTAL STUDY AREA 75.0 ha.

①NOTE - Portions of this area can be developed as part of other developments.

CALGARY INNOVATIVE DESIGN COMPETITION

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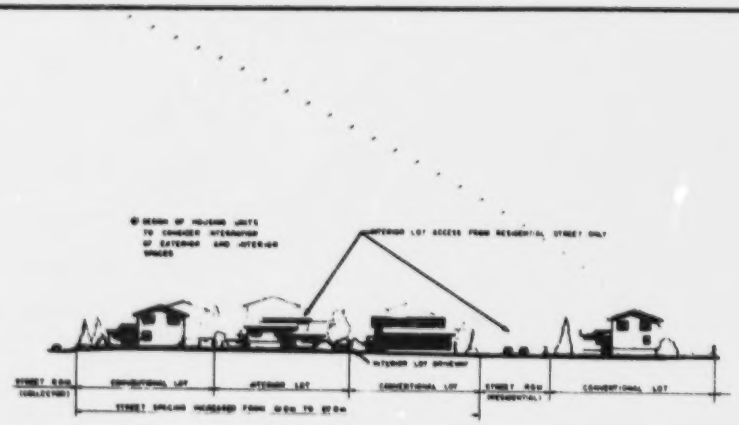
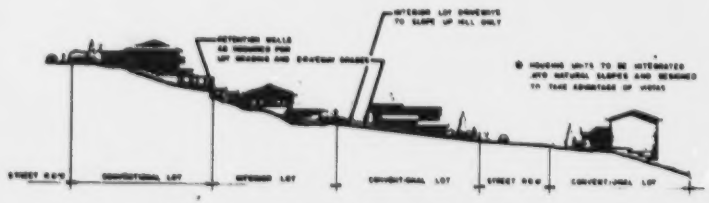
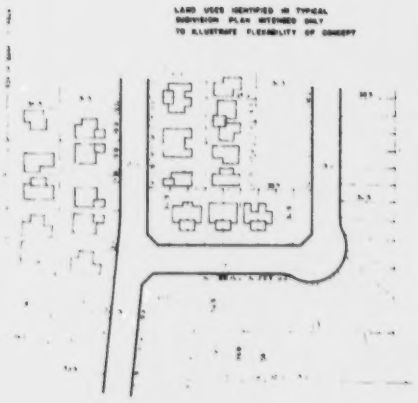


TYPICAL SECTION – LEVEL LOTS
Scale 1:400



TYPICAL SECTION – SLOPING LOTS
Scale 1:400



TYPICAL SUBDIVISION PLAN
Scale 1:400

LEGEND

PROPERTY LINE

HOUSING UNIT

CALGARY INNOVATIVE DESIGN COMPETITION

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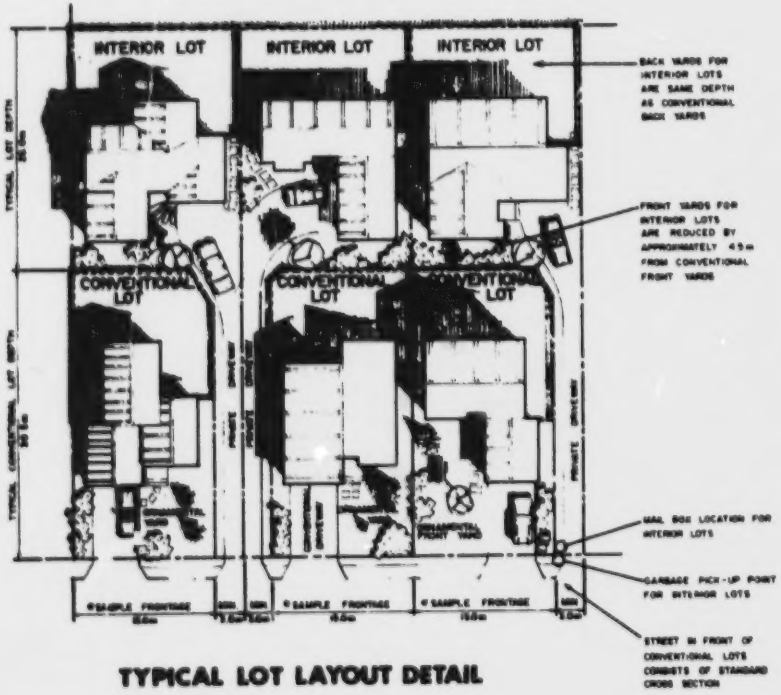
Drawing 4 of 6

TYPICAL STREET ELEVATION



TYPICAL LOT LAYOUT DETAIL

Scale 1:200

• NOTE:

CONCEPT IS FLEXIBLE AND CAN BE USED FOR ALL DETACHED AND SEMI-DETACHED HOUSING. SAMPLE FRONTAGE PRESENTED IN TYPICAL LOT LAYOUT DETAIL IS FOR ILLUSTRATIVE PURPOSES ONLY

TYPICAL LOT SPECIFICATIONS FOR SAMPLE LOT DETAIL

	Interior Lot	Conventional Lot
FRONT YARD	3.0m	7.5m
SIDE YARD	1.5m	1.5m
BACK YARD	7.5m	7.5m
LOT WIDTH	10.0m	15.0m
LOT DEPTH	30.5m	26.0m
STREET ACCESS	3.0m	n/a
LOT AREA	380.5m²	407.5m²

DEVELOMENT CONTROLS:

DEVELOPMENT CONTROLS WILL BE REQUIRED TO ENSURE

- DEVELOPMENT UNITY
- PROPER INTEGRATION OF HOUSING UNIT AND LOT
- ADEQUATE USE OF VISTAS
- IDENTIFY PROPER LOT GRADING AND BASEMENT ELEVATIONS

LEGEND

- LOT LINES
- FENCE
- SHRUBS
- CONIFEROUS TREE
- DECIDUOUS TREE

CALGARY INNOVATIVE DESIGN COMPETITION

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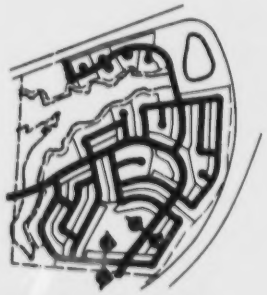
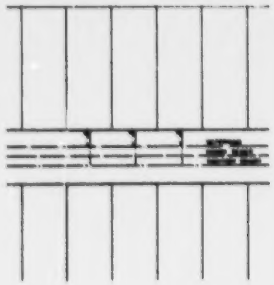
Drawing 5 of 6



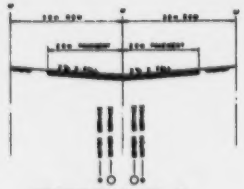
CONVENTIONAL PLAN

SECTION A-A
COLLECTOR R.O.W.

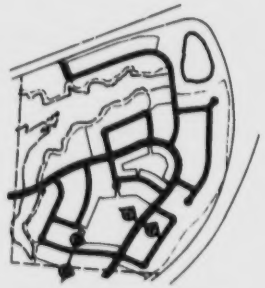
SECTION B-B
RESIDENTIAL R.O.W.



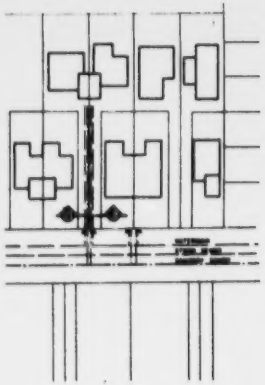
CONVENTIONAL LOT SERVICING



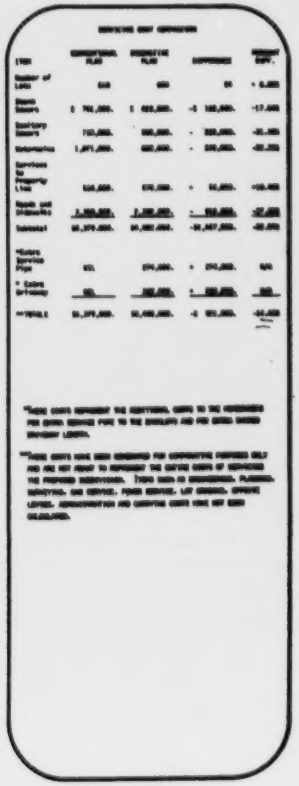
SECTION C-C
INTERIOR LOT DRIVEWAYS



INNOVATIVE PLAN



INNOVATIVE LOT SERVICING



CALGARY INNOVATIVE DESIGN COMPETITION

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Drawing 6 of 6

STANLEY ASSOCIATES ENGINEERING

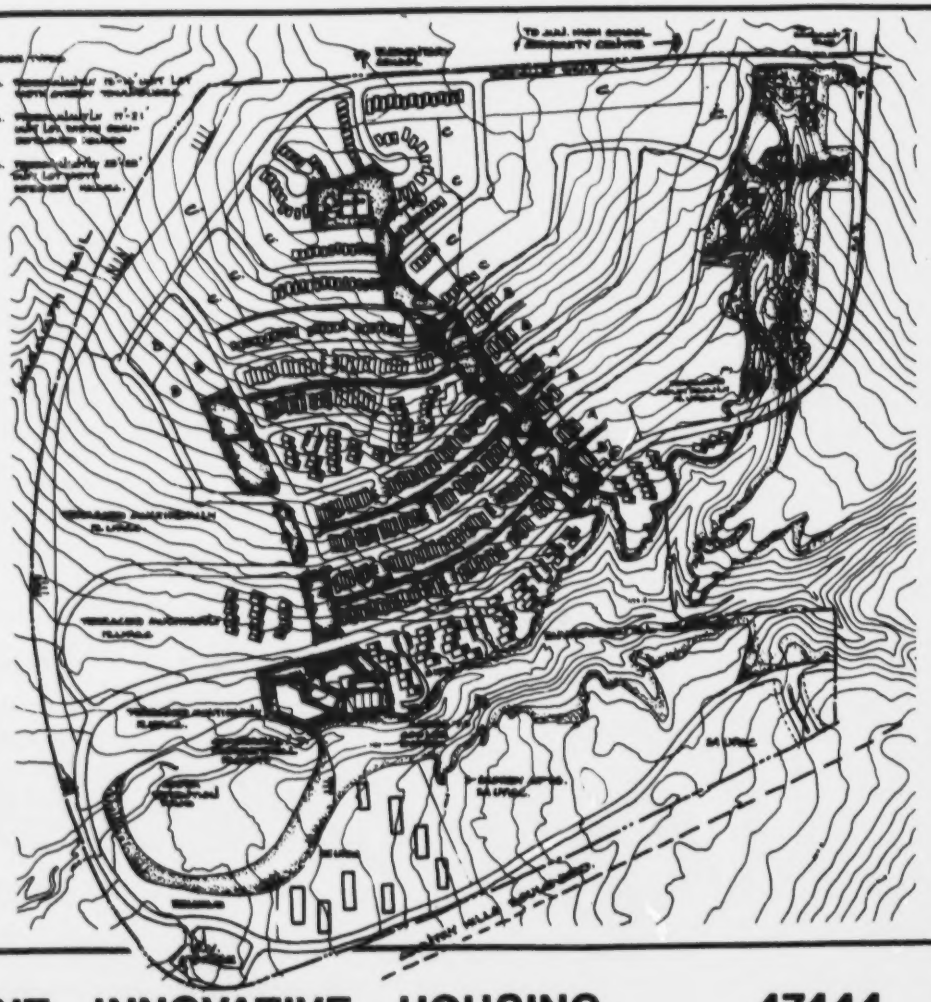
SECOND PRIZE: **CALGARY, ALBERTA**

Technical

L. Guyn:
This is practical. It is not a particularly innovative project but rather an extension of existing practices.

P. Hemingway:
A well considered solution to technical site conditions. Housing and planning sacrificed to some extent to technical aspects.

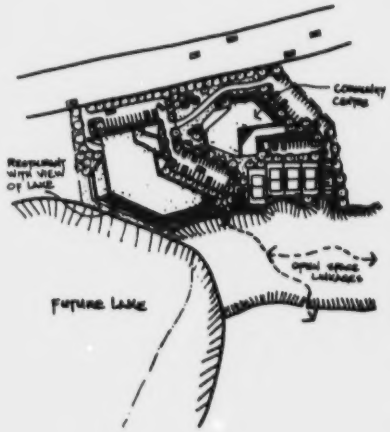
B. Pendergast:
I can perceive very little of an innovative approach in the proposal in terms of form and architecture. Layout looks competent but not very exciting. Proposal seems best in summarizing the better planning and marketing concepts/objectives to be followed in current and future subdivision planning.



EDGEMONT INNOVATIVE HOUSING

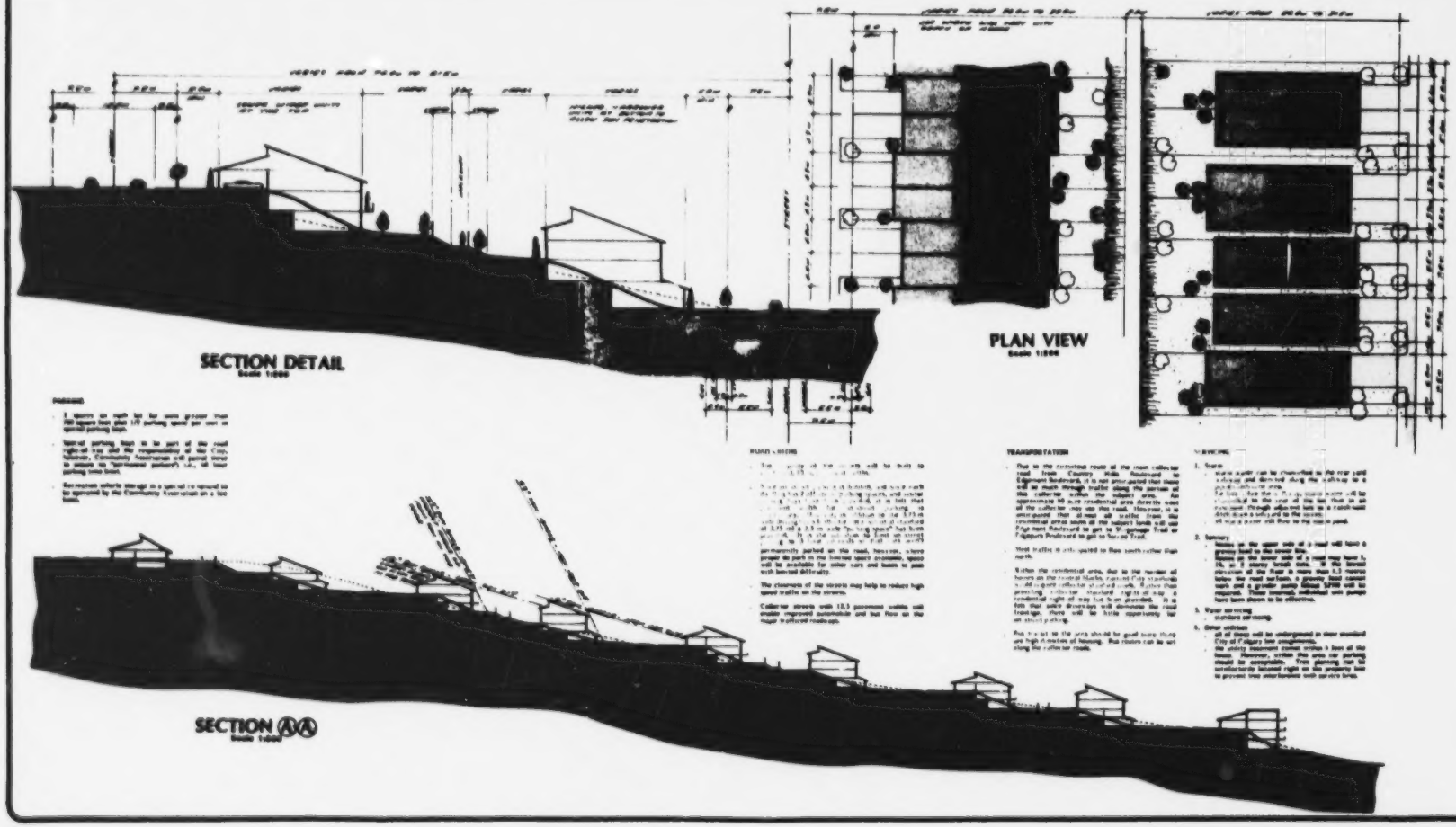
47444

Stanley



EDGEMONT INNOVATIVE HOUSING 47444

Stanley
STANLEY ASSOCIATES ENGINEERING LTD.



EDGEMONT INNOVATIVE HOUSING 47444

Stanley

INNOVATIVE IDEAS

MERIT AWARD: John Bousfield Associates Ltd./
D. K. Mesbur, Architect
MERIT AWARD: Hok Lin Lung
MERIT AWARD: The Sturgess Partnership

BOUSFIELD ASSOCIATES/D.K. MESBUR, ARCHITECT

MERIT AWARD: TORONTO, ONTARIO
Innovative Idea

L. Guyn:
Good use of structures for sound attenuation.

P. Hemingway:
This is a short term solution. It is a serious attempt to deal with the basic problem of housing costs. Not enough attention is paid to human aspects of design.

R. Kinney:
Not much real innovation, but a good attempt at solving a poor site. Given the problems of the site, the siting and housing is rather interesting. However, there is too much road and the layout is standard.

B. Norton:
Dual/opposite exposure at a higher density is positive. Cul-de-sac and townhouse strip elevations would be oppressive. Good concept but needs design review. Some architects are proposing similar ideas in town: B. Pendergast's recent submission for the City of Calgary, (apartment version).

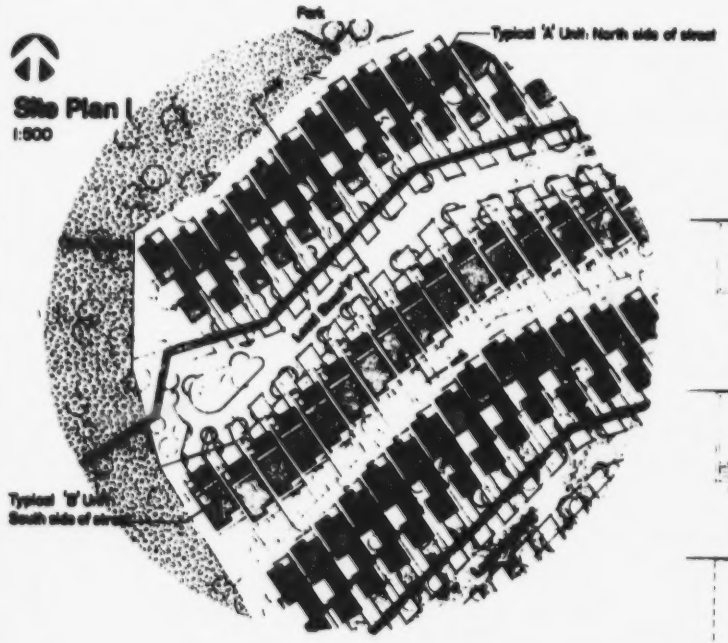
B. Pendergast:
Seems very straightforward traditional concept.

G. Steber:
This could result in attractive and denser residential environment. There are technical difficulties with some aspects of layout. It is not untypical of many developments.

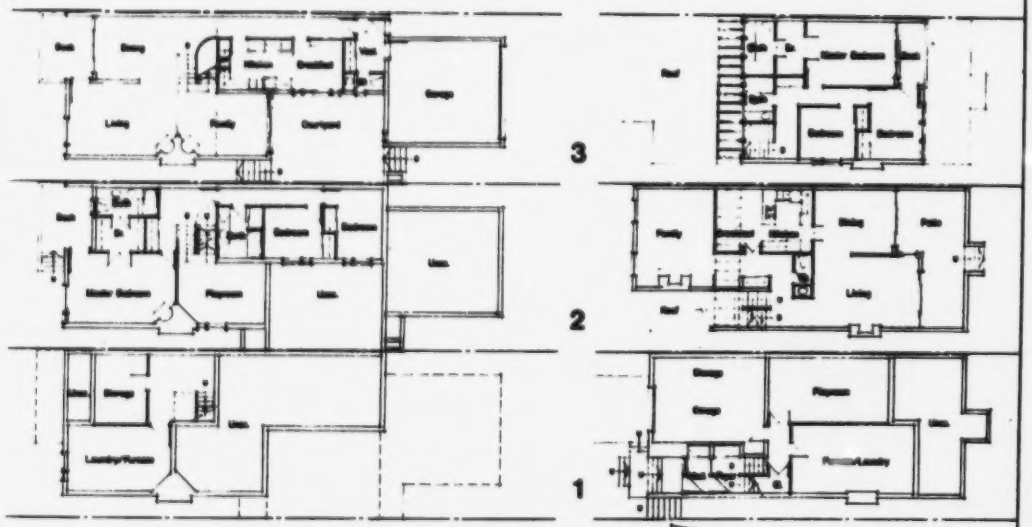
Low Density Housing 1

Innovative Land and Housing Design Competition

Carma Developers Ltd.
Calgary, Alberta 96135



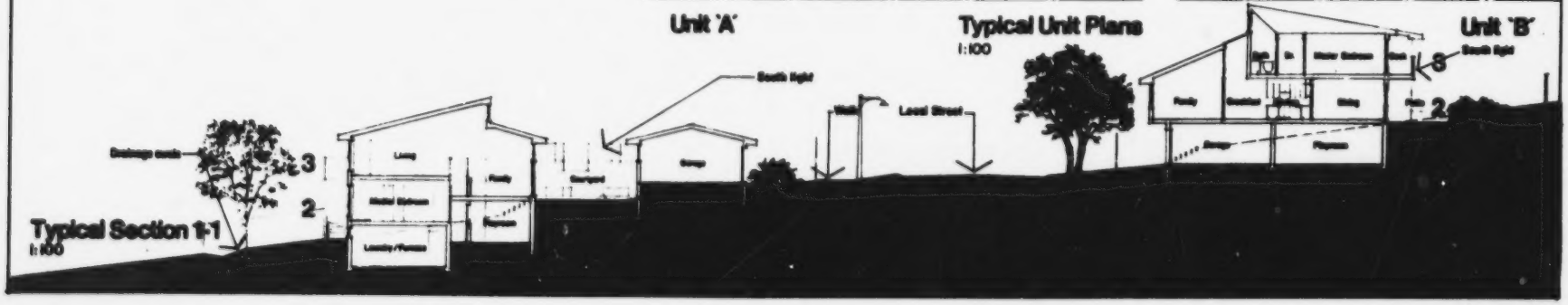
Site Plan
1:500



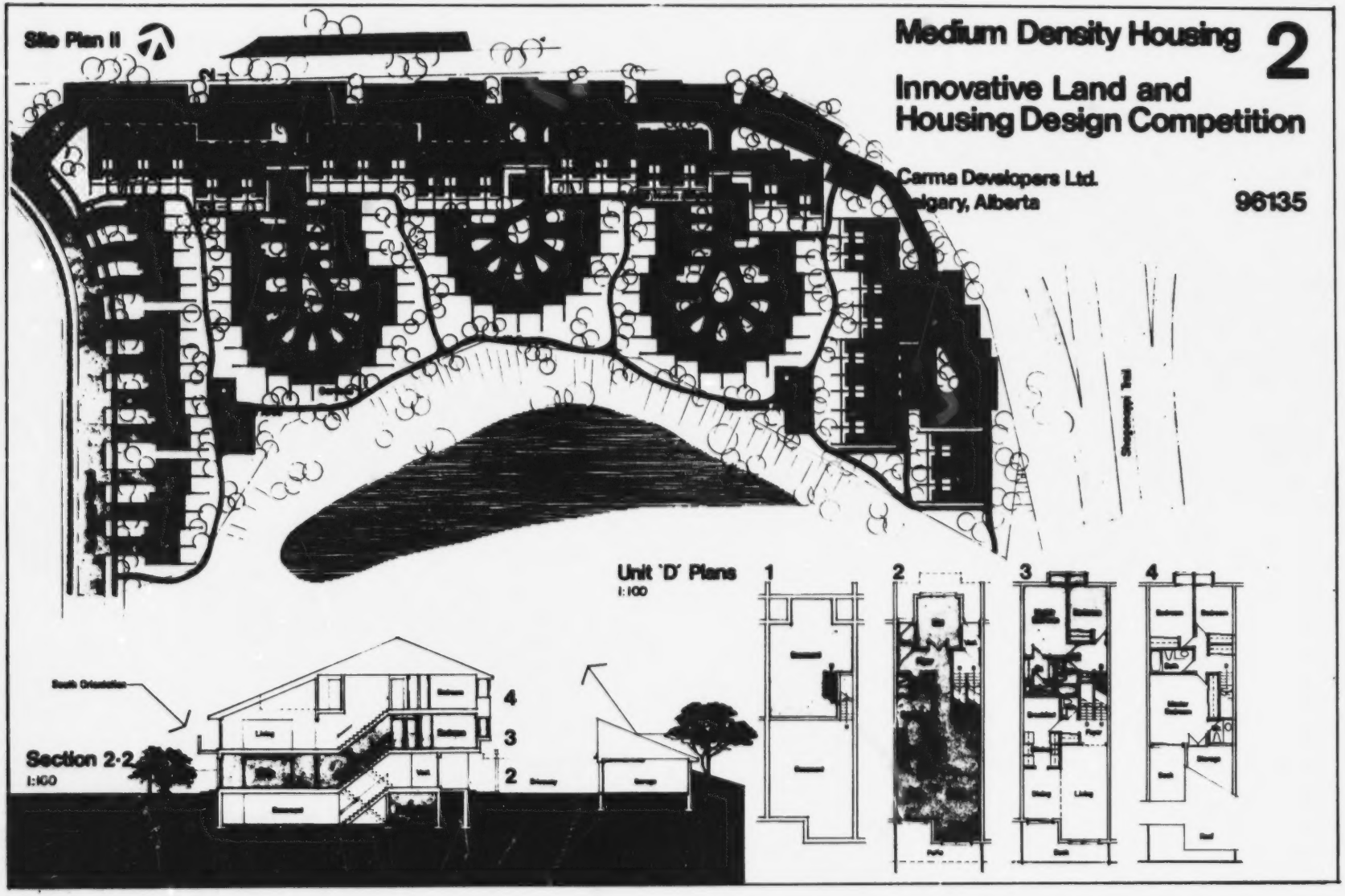
Unit 'A'

Typical Unit Plans
1:100

Unit 'B'



Typical Section 1-1
1:100


Site Plan II
N
Medium Density Housing
2
Innovative Land and
Housing Design Competition
Carma Developers Ltd.
lgary, Alberta
96135
Unit 'D' Plans
1:100
1
2
3
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Section 2-2
1:100
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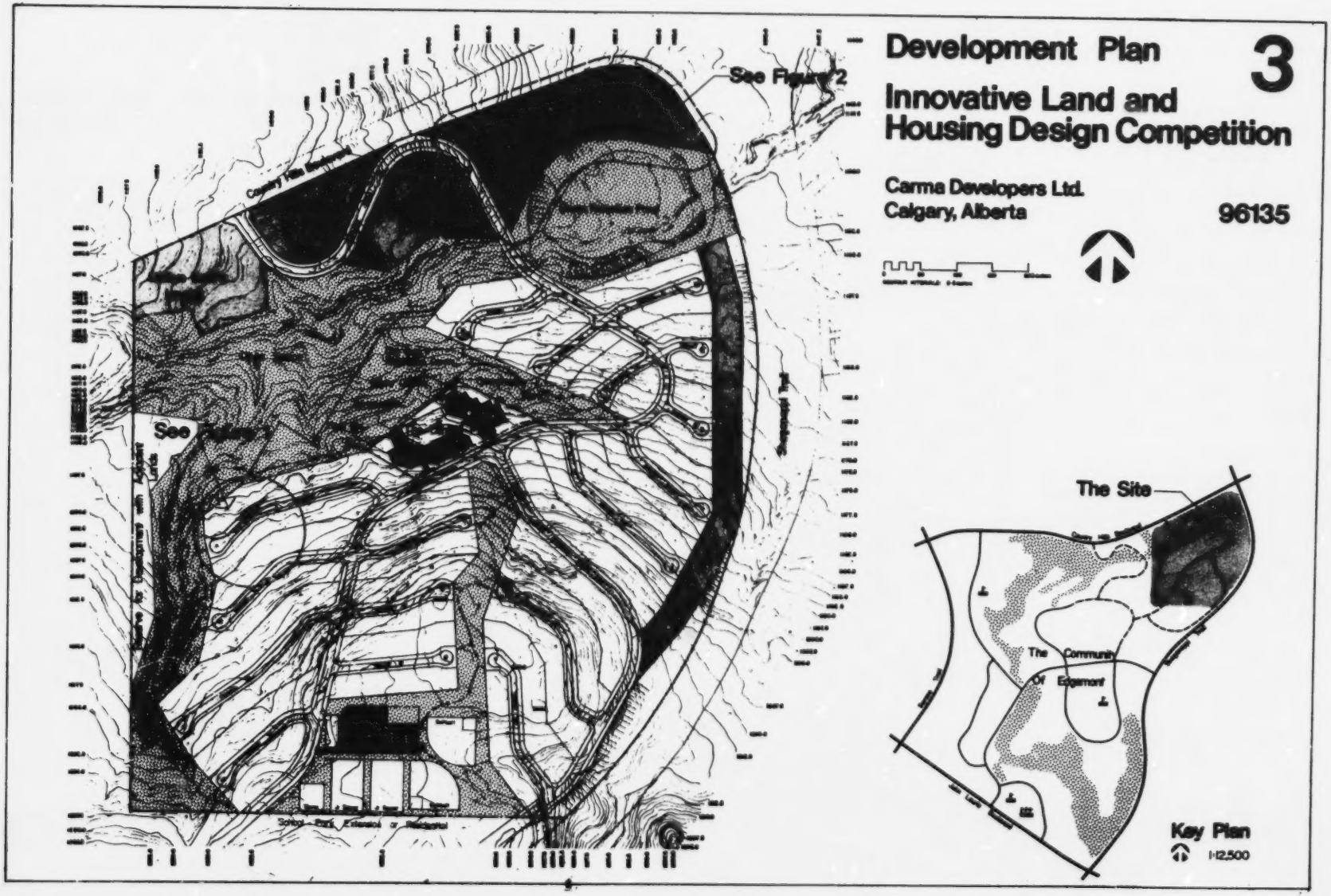


Development Plan 3

Innovative Land and Housing Design Competition

Carma Developers Ltd.
Calgary, Alberta

96135

HOK LIN LUNG

MERIT AWARD: Innovative Ideas

KINGSTON ONTARIO

L. Guyn:
Not practical on this site (grades).

P. Hemingway:
Interesting attempt to encourage distinctive community. Graphics are a little tight, could be improved. Shows imagination in design of central core. Might however, prove a little dreary in some aspects.

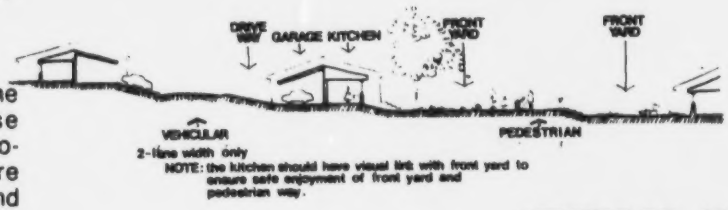
R. Kinney:
Innovative sense of built community, but poor layout.

B. Pendergast:
Generally a basic Radburn layout without any special attributes.

G. Steber:
Strong sense of location in the pedestrian-only townhouse spine. Strong image — European village scale. There are possible code compliance and land use problems.

TOWNHOUSE 1
WITH BALCONY

TOWNHOUSE 2
WITH BAY-WINDOWS

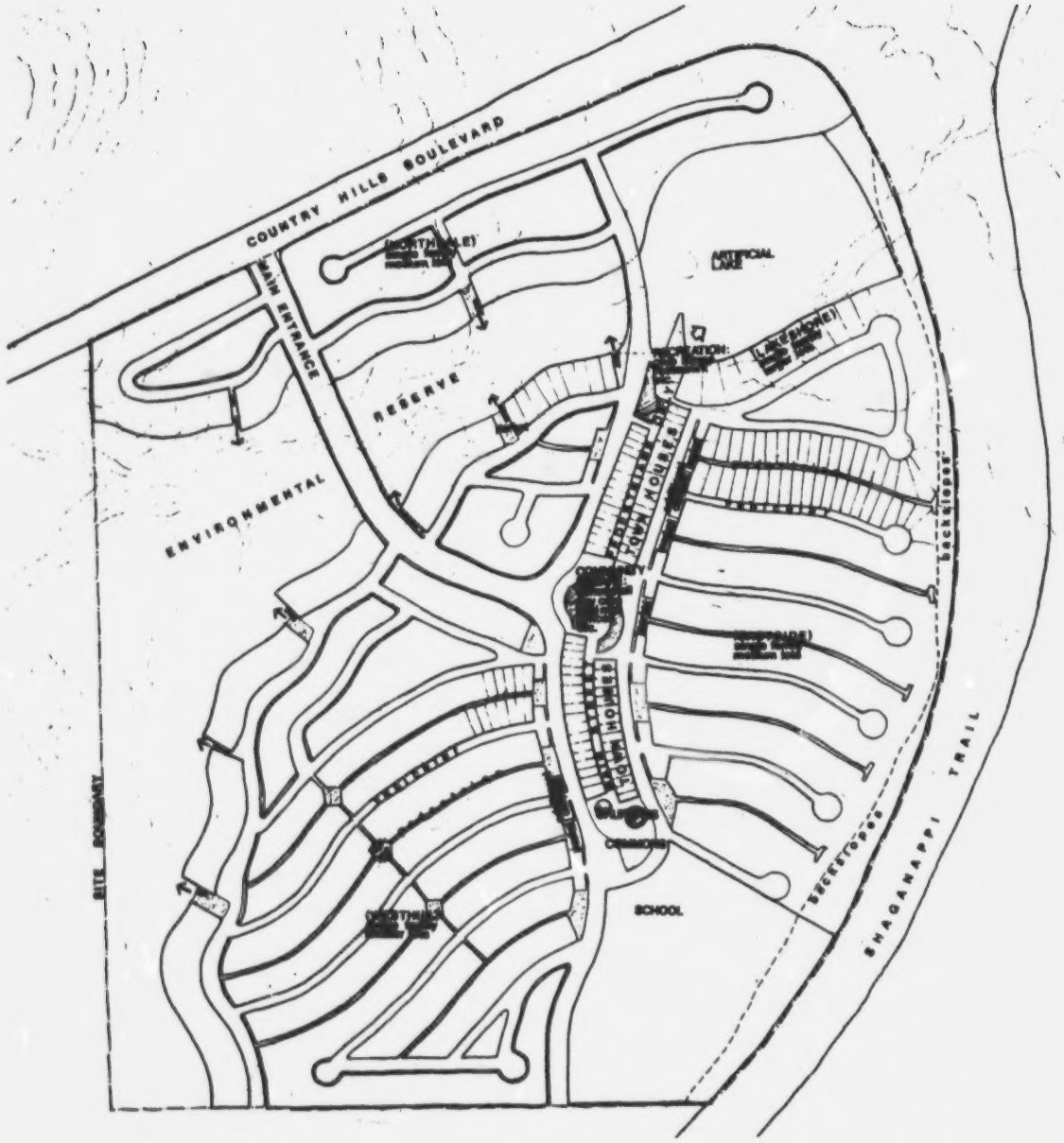


VEHICULAR AND PEDESTRIAN WAYS

ARTIFICIAL LAKE

ARTIST'S IMPRESSION OF DEVELOPMENT
BIRD'S EYE VIEW

INNOVATIVE LAND & HOUSING DESIGN COMPETITION



81928

DESIGN IDEAS:

PEDESTRIAN WALKWAY AND MARKET SYSTEM

PEDESTRIAN AND VEHICULAR MOVEMENTS ARE SEPARATED TO ENSURE SAFE AND ENJOYABLE WALKING.
ALL SINGLE FAMILY HOMES ARE LINKED BY PEDESTRIAN WALKWAYS LEADING TO SMALL PARKS (MARKETS), FOR SITTING AND CHILDREN PLAYING, WHICH FORM NODES ALONG THE WALKWAY SYSTEM.
VEHICULAR ACCESS IS FROM THE BACK OF THE HOUSE, WITH ADDITIONAL PARKING AT STREET CORNERS.
THE MAIN STREET IS FOR PEDESTRIAN ONLY.

COMMUNITY STREET

THE MAIN STREET IS THE FUNCTIONAL AND VISUAL SPINE OF THE WHOLE COMMUNITY.
THE STREET OFFERS A LINEAR SEQUENCE OF DIFFERENT COMMUNITY FUNCTIONS. THE COMMUNITY SQUARE IS THE END WITH THE COMMUNITY HALL, DAY-CARE CENTRE, YOUTH-HALL, OFFICES, ETC.
FROM THE SQUARE ROWS OF TOWNHOUSES RUN UP THE HILL TO THE COMMONS AND THE CHURCHES, AND THE SCHOOL BEYOND. FROM THE HILL THE STREET LEADS TO THE LAKE WHERE RECREATIONAL AND RESTAURANT FACILITIES ARE PROVIDED FOR PUBLIC ENJOYMENT.
THE MAIN STREET IS PUNCTUATED BY GATES PROVIDING PEDESTRIAN ACCESS TO AND FROM THE SINGLE FAMILY HOMES.

NATURAL TOPOGRAPHY

THE LAYOUT FOLLOWS THE NATURAL TOPOGRAPHY.
VISUALLY, THE NATURAL TERRACE AND VIEWS ARE RESPECTED AND PRESERVED.
COST-WISE, SITE PREPARATION COST IS SIGNIFICANTLY REDUCED, YET REASONABLY SHAPED LOTS ARE MAINTAINED.

ENVIRONMENTAL AMENITIES

THE TOPOGRAPHIC FEATURES OF THE ENVIRONMENTAL RESERVE ARE PRESERVED TO ENHANCE VISUAL AMENITIES AND PROVIDE VALUABLE GROUP SITES.
AN ARTIFICIAL LAKE IS CREATED AT THE STORM RETENTION AREA AS A DESIGN FEATURE AND PUBLIC ENJOYMENT AND PRESTIGEOUS HOUSE LOCATIONS.

: SMALL PARKS, OR "MARKETS"
: COMMUNITY BUILDINGS

SCALE : 1:2000
CONTOUR INTERVAL : 2.5 M

INNOVATIVE LAND & HOUSING DESIGN COMPETITION

THE STURGESS PARTNERSHIP

MERIT AWARD: **CALGARY, ALBERTA**
Innovative Idea

L. Guyn:
Very innovative but not very practical. I can't imagine a developer proceeding with such a proposal.

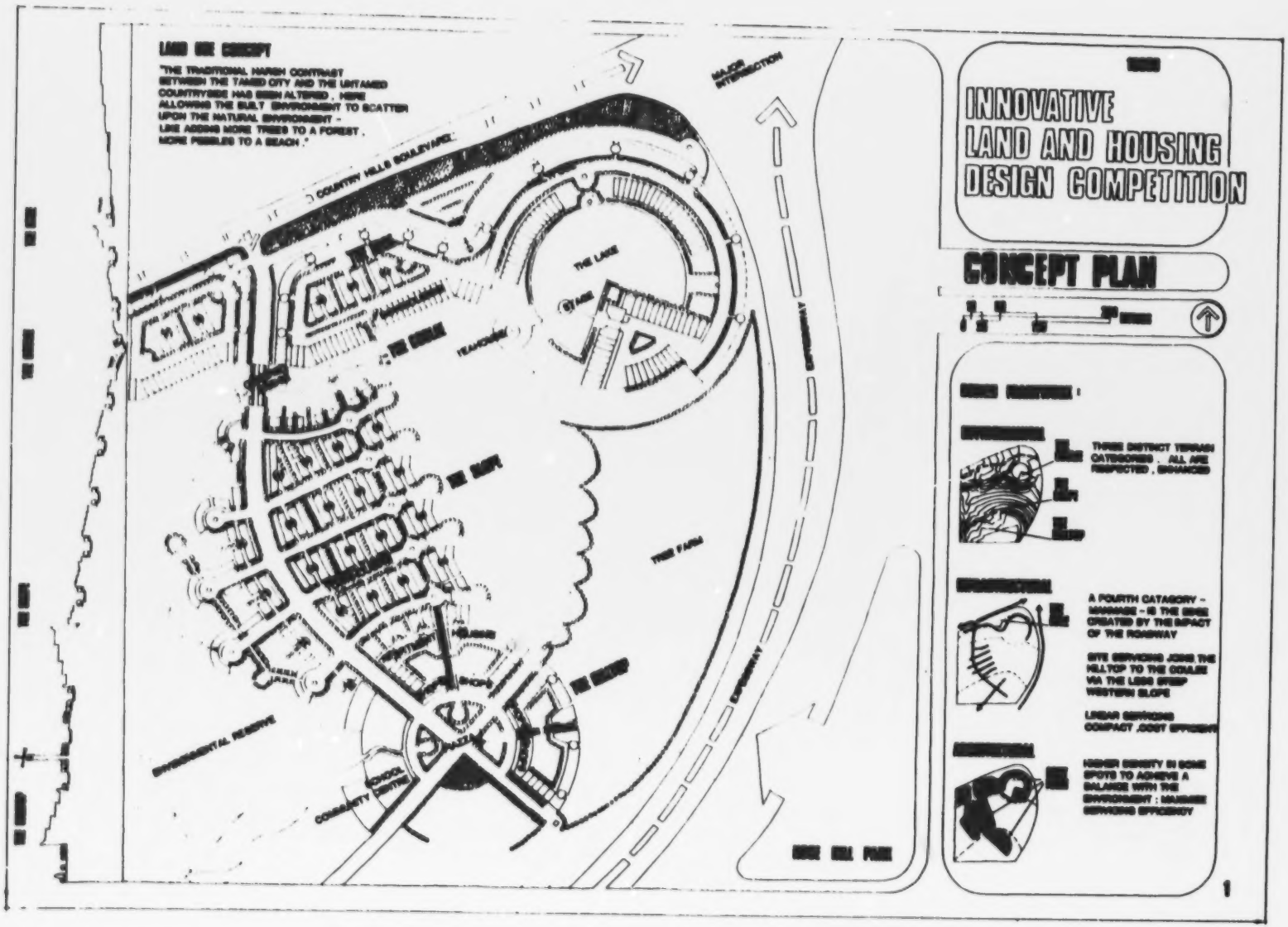
P. Hemingway:
Interesting method of handling edge conditions. It is one of the better presentations. It is a poetic attempt to handle density, a little too rigid and too dependant upon pre-determined housing forms.

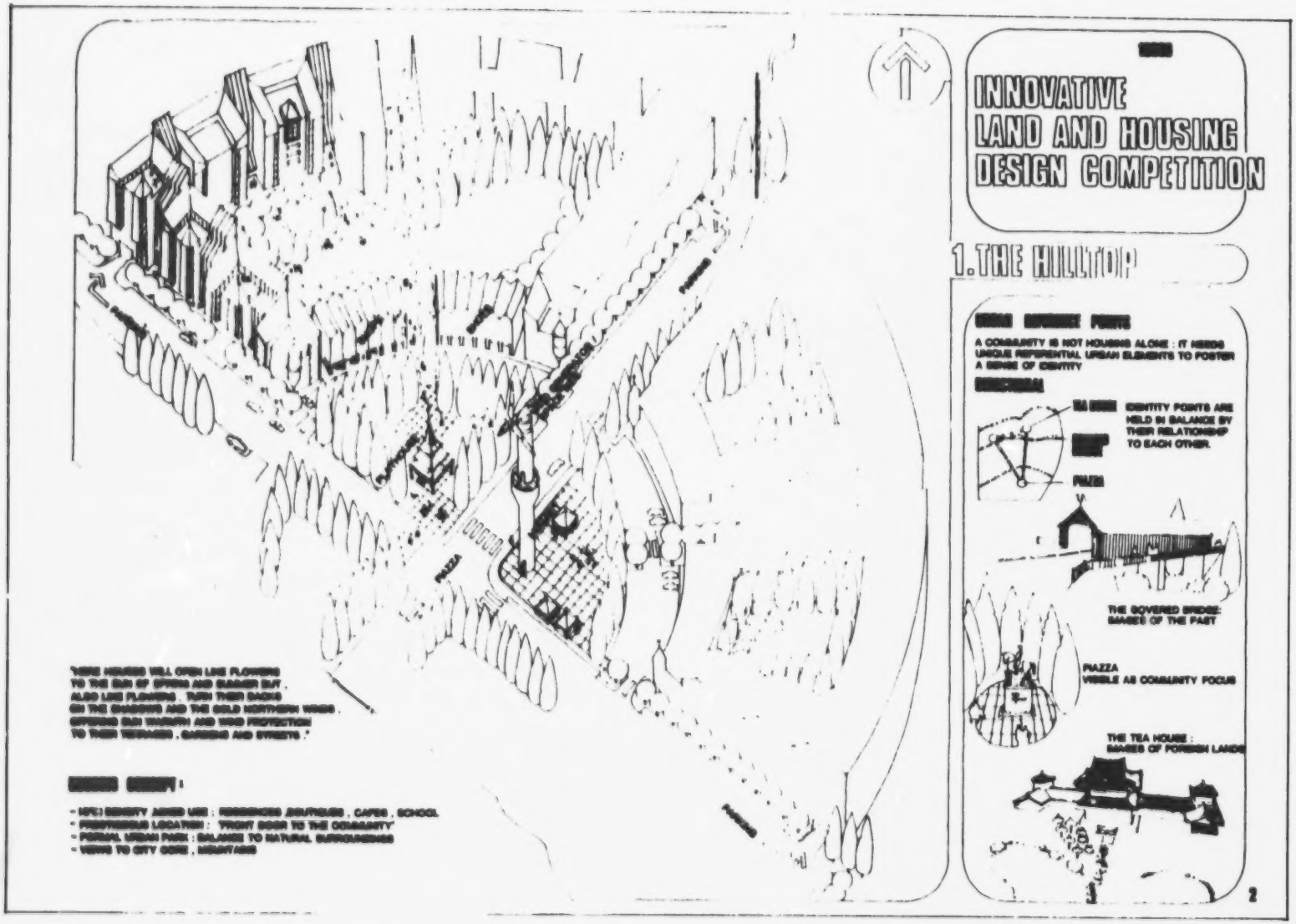
R. Kinney;
A lot of thought went into this. Site contours handled well. There is, however, too little land used - economically disastrous.

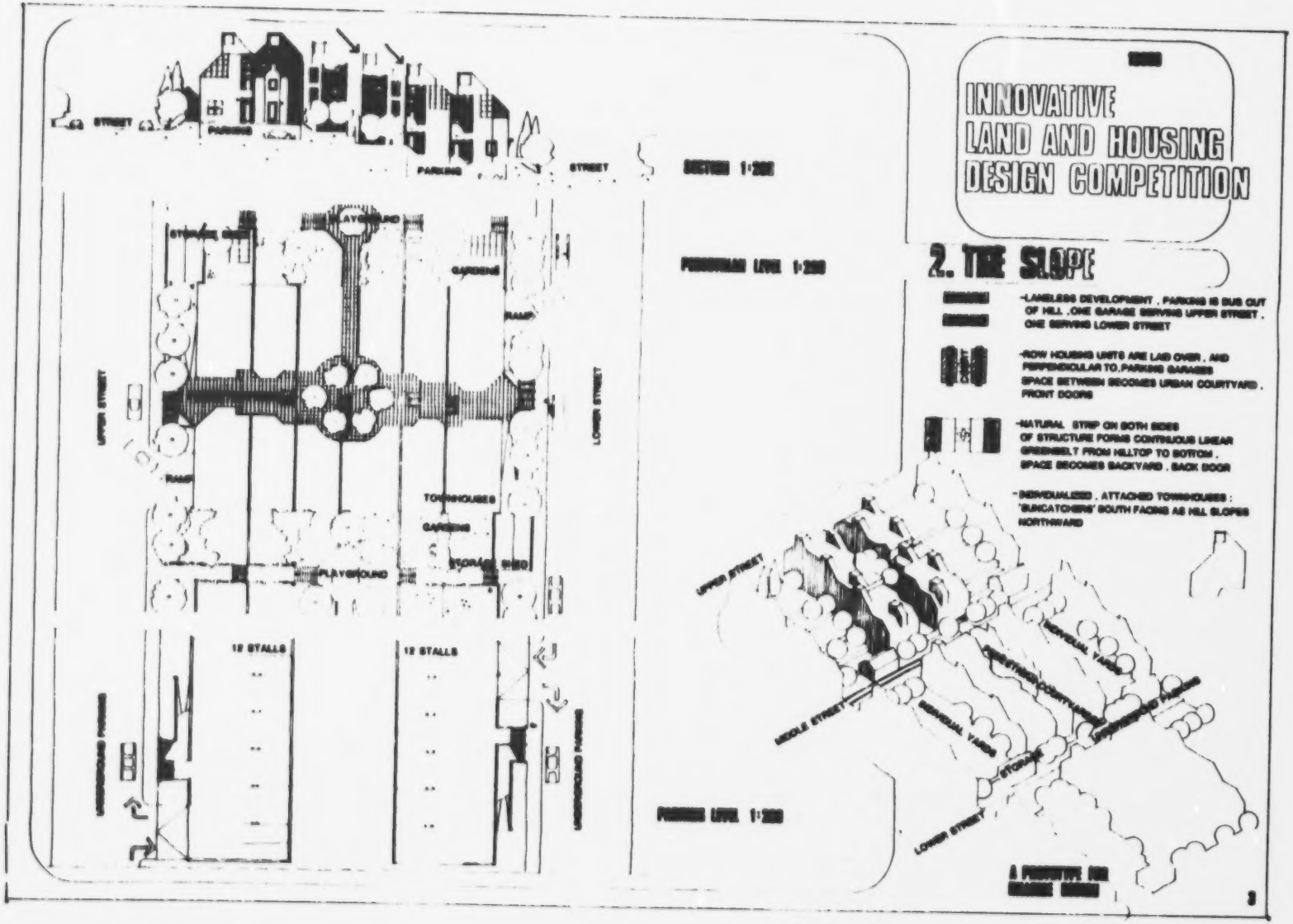
B. Norton:
Orientation positive, pedestrian aspect positive, but stall/unit distance is a problem. Things like wind generators cause me problems. I do not consider underground parking for a townhouse scheme as reasonable cost-wise. I like the sequencing but find the formality too strong. Coulee process is novel for Calgary. It would be interesting to look at it a bit more deeply.

B. Pendergast:
I liked this the best of all of the winners—especially the attention to detail in terms of scale, slope adaptation and energy considerations. Although the site plan is very formal, the scheme at a detail level is quite the opposite. As with the others I have concerns with the degree of public open space — I would have preferred a higher density.

G. Steber:
Lucid graphics, well thought out concepts, formality too rigid and contrast too strong to adjacent communities.

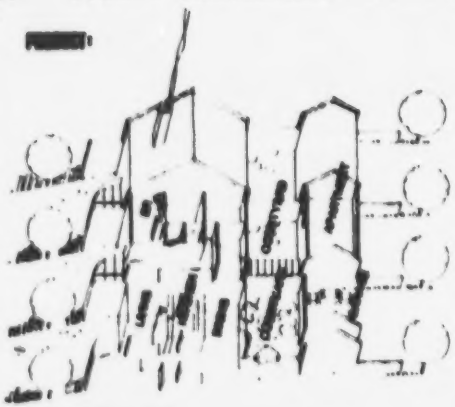

"THE TRADITIONAL HARSH CONTRAST BETWEEN THE TAMED CITY AND THE UNTAMED COUNTRYSIDE HAS BEEN ALTERED . HERE ALLOWING THE BUILT ENVIRONMENT TO SCATTER UPON THE NATURAL ENVIRONMENT - LIKE ADDING MORE TREES TO A FOREST . MORE PEBBLES TO A BEACH ."
COUNTRY HILLS BOULEVARD
MAJOR INTERSECTION
THE LAKE
COMMUNITY SCHOOL
INNOVATIVE
LAND AND HOUSING
DESIGN COMPETITION
CONCEPT PLAN
THREE DISTINCT TERRAIN CATEGORIES . ALL ARE RESPECTED , ENHANCED
A FOURTH CATAGORY - MANMADE - IS THE SCAR CREATED BY THE IMPACT OF THE ROADWAY
SITE SERVICING JOINS THE HILLTOP TO THE COULEE VIA THE LESS STEEP WESTERN SLOPE
LINEAR SERVICING COMPACT ,COST EFFICIENT
HIGHER DENSITY IN SOME SPOTS TO ACHIEVE A BALANCE WITH THE ENVIRONMENT ; MAXIMUM SERVICING EFFICIENCY
1


INNOVATIVE
LAND AND HOUSING
DESIGN COMPETITION
1.THE HILLTOP
A COMMUNITY IS NOT HOUSING ALONE : IT NEEDS UNIQUE REFERENTIAL URBAN ELEMENTS TO FOSTER A SENSE OF IDENTITY
IDENTITY POINTS ARE HELD IN BALANCE BY THEIR RELATIONSHIP TO EACH OTHER.
PIAZZA
THE COVERED BRIDGE:
IMAGES OF THE PAST
PIAZZA
VISIBLE AS COMMUNITY FOCUS
THE TEA HOUSE :
2


INNOVATIVE
LAND AND HOUSING
DESIGN COMPETITION
2. THE SLOPE
-LANELESS DEVELOPMENT, PARKING IS DUG OUT OF HILL, ONE GARAGE SERVING UPPER STREET, ONE SERVING LOWER STREET
-ROW HOUSING UNITS ARE LAID OVER, AND PERPENDICULAR TO, PARKING GARAGES SPACE BETWEEN BECOMES URBAN COURTYARD, FRONT DOORS
-NATURAL STRIP ON BOTH SIDES OF STRUCTURE FORMS CONTINUOUS LINEAR GREENBELT FROM HILLTOP TO BOTTOM, SPACE BECOMES BACKYARD, BACK DOOR
-INDIVIDUALIZED, ATTACHED TOWNHOUSES: 'SUNCATCHERS' SOUTH FACING AS HILL SLOPES NORTHWARD
STREET
PARKING
PARKING
STREET
PLAYGROUND
GARDENS
RAMP
UPPER STREET
LOWER STREET
RAMP
TOWNHOUSES
GARDENS
STORAGE SHED
PLAYGROUND
12 STALLS
12 STALLS
UPPER STREET
MIDDLE STREET
INDIVIDUAL YARDS
INDIVIDUAL YARDS
STORAGE
LOWER STREET
3

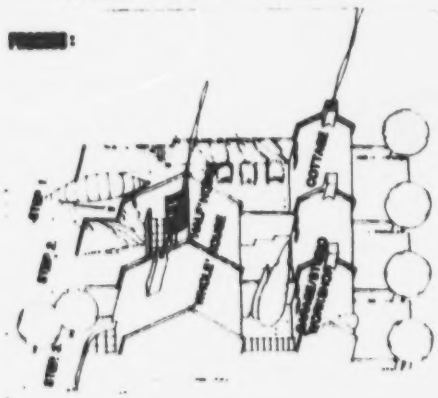
INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

3. THE COULEE



THE SYSTEM:

- ELEVATIONAL SIDE WALL AS FORM DETERMINANT



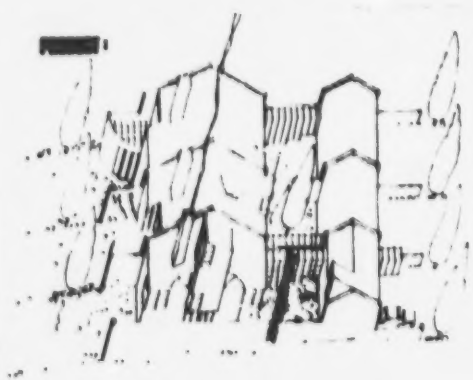
DO - IT - YOURSELF:

STEP 1. BUY LOT WITH TWO STORY COTTAGE
STEP 2. BUILD 'HALF' HOUSE , LIVE IN COTTAGE
STEP 3. FINISH 'WHOLE' HOUSE , COTTAGE BECOMES GARAGE / STUDIO / WORKSHOP

"THE TERM INDIVIDUAL IS NOT A QUESTION OF DESIGNING COLLECTIVE OR INDIVIDUAL BUILDINGS BUT BRINGING INDIVIDUALITY TO COLLECTIVE UNITS."

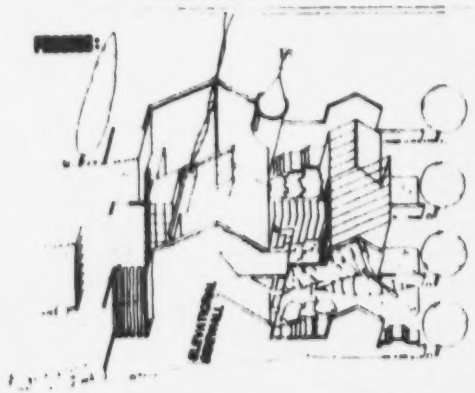
ARCHITECTURE INFERS PRODUCT ,
WHILE URBAN DESIGN INFERS PROCESS

A HOUSING SYSTEM WAS SOUGHT TO PROVIDE A VARIETY OF SOLUTIONS , FROM THE VIEWPOINT OF BOTH 'PRODUCT' AND 'PROCESS' .



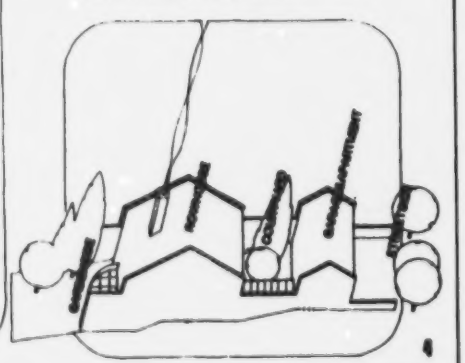
ARCHITECTURALLY DESIGNED ROW HOUSING:

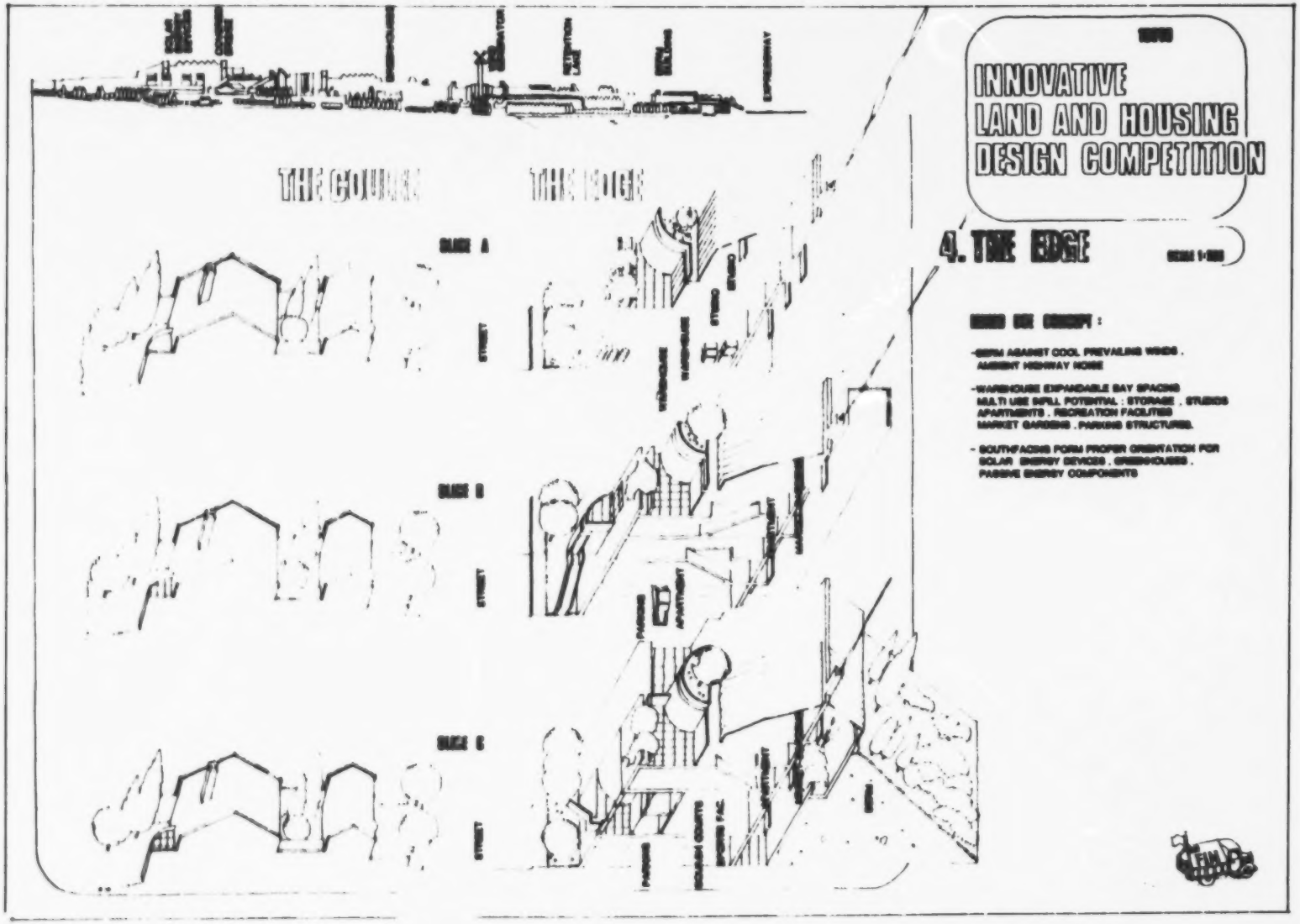
- SIMPLE FORM , COST EFFICIENT
- ADDITIONS : DECKS , DORMERS , TOWERS
- 'ZERO' LOT LINE CAPABILITY



DESIGN GUIDLINES FOR SUBDIVISIONS:

- LAND DEVELOPER PROVIDES ELEVATIONAL SIDEWALL CONTROL
- INDIVIDUAL BUILDERS DESIGN INFILL TO THEIR OWN PROGRAM REQUIREMENTS




INNOVATIVE
LAND AND HOUSING
DESIGN COMPETITION
4. THE EDGE

STUDENT WORK

MENTION: John Alley, University of Calgary
MENTION: John Asimakos, Nova Scotia College of Art & Design
MENTION: Beth MacDonald, Nova Scotia College of Art & Design
MENTION: Janice Snair, Nova Scotia College of Art & Design

JOHN ALLEY

CALGARY, ALBERTA

Student Award

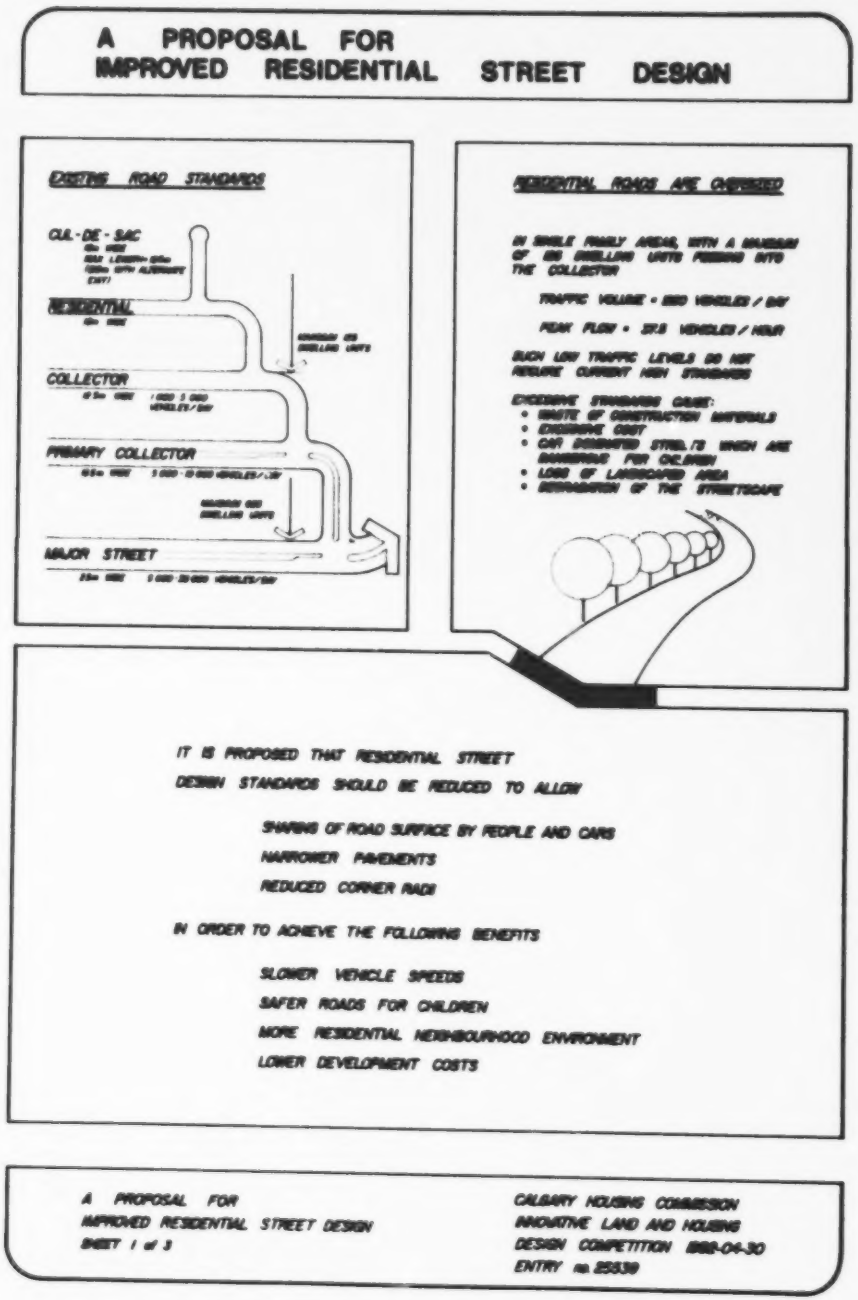
L. Guyn:
Would have merit in regions that have low auto/people ratio. It is not practical here — this is an auto orientated market place.

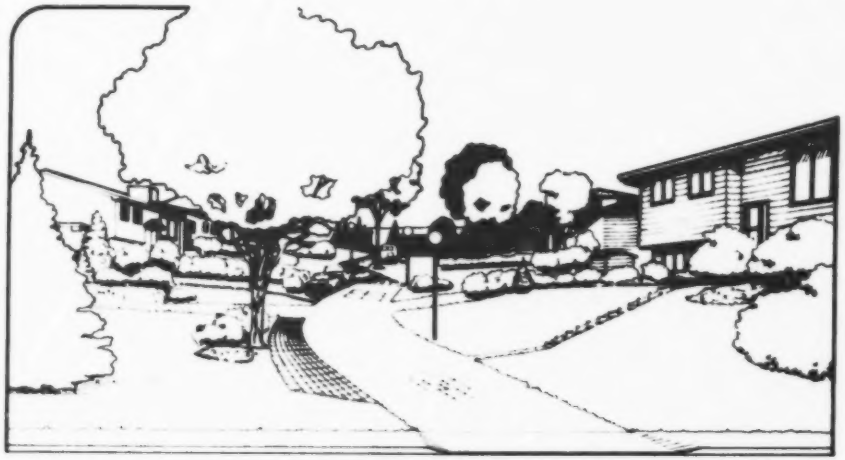
P. Hemingway:
A serious attempt to deal with problems of street design. Other design aspects ie., social aspects are overlooked.

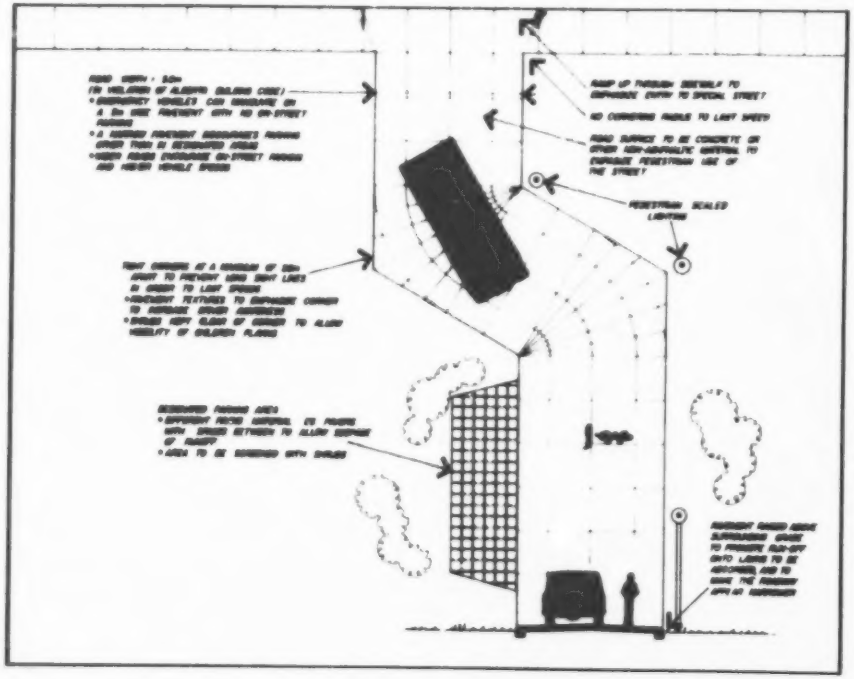
R. Kinney:
A good recapitulation of taught techniques.

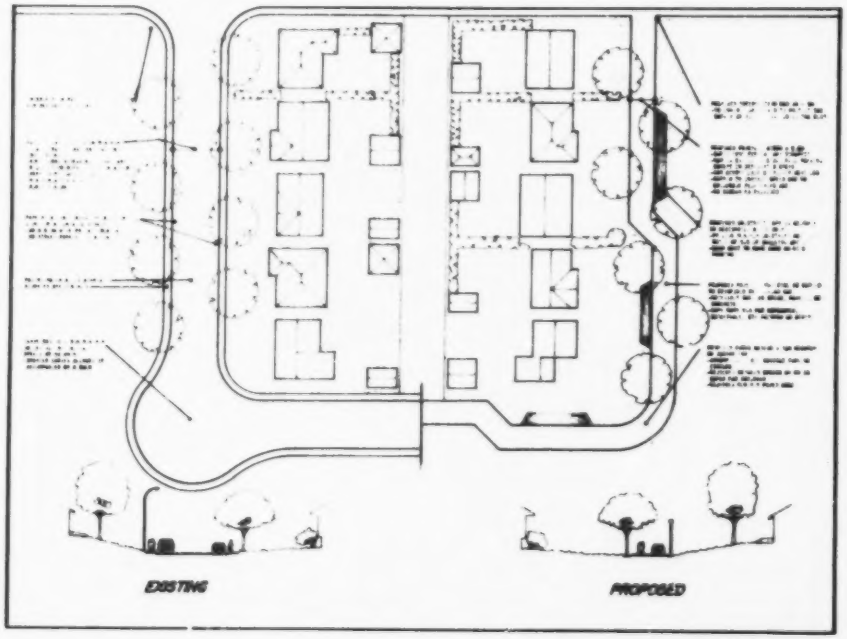
B. Pendergast:
This is an ideal concept to try in a current subdivision on an experimental basis and perhaps on a modest scale to evaluate if any congestion or fire safety problems are likely to occur.

G. Steber:
The principle of lay by's is good versus continuous pavements. The need to cut standards are worth looking at again — lower standards of street lighting etc. Servicing is not dealt with — no reference to city services, fire, etc. There are many precedents to this scheme in the U.K., U.S., Europe, Japan.









A PROPOSAL FOR
IMPROVED RESIDENTIAL STREET DESIGN
SHEET 2 of 3

CALGARY HOUSING COMMISSION
INNOVATIVE LAND AND HOUSING
DESIGN COMPETITION 1982-04-30
ENTRY no. 25539

A PROPOSAL FOR
IMPROVED RESIDENTIAL STREET DESIGN
SHEET 3 of 3

CALGARY HOUSING COMMISSION
INNOVATIVE LAND AND HOUSING
DESIGN COMPETITION 1982-04-30
ENTRY no. 25539

PETER ASIMAKOS
SACKVILLE, NEW BRUNSWICK

Student Award

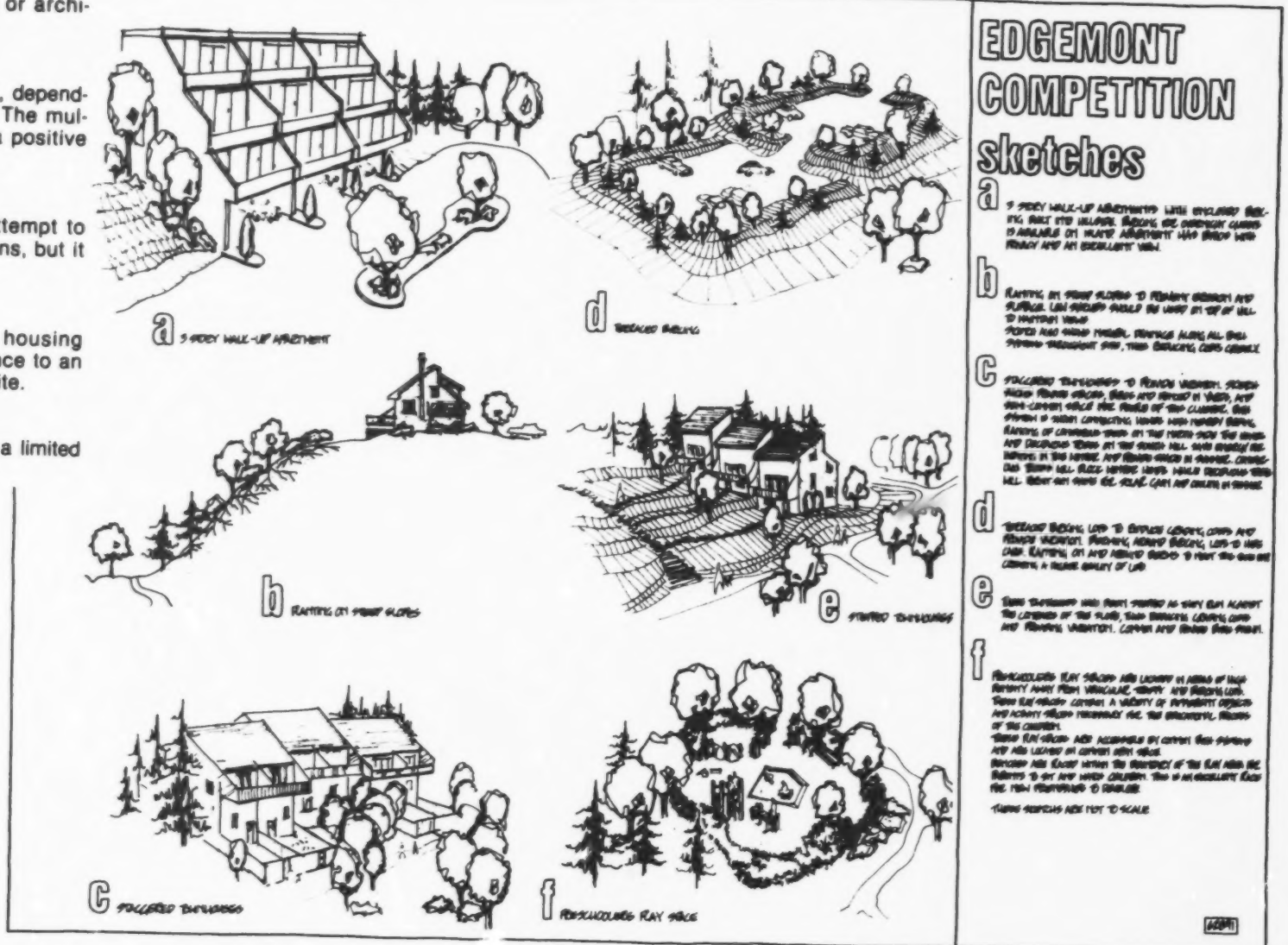
B. Pendergast:
I thought the whole proposal somewhat lacking in any original ideas in planning or architectural concepts.

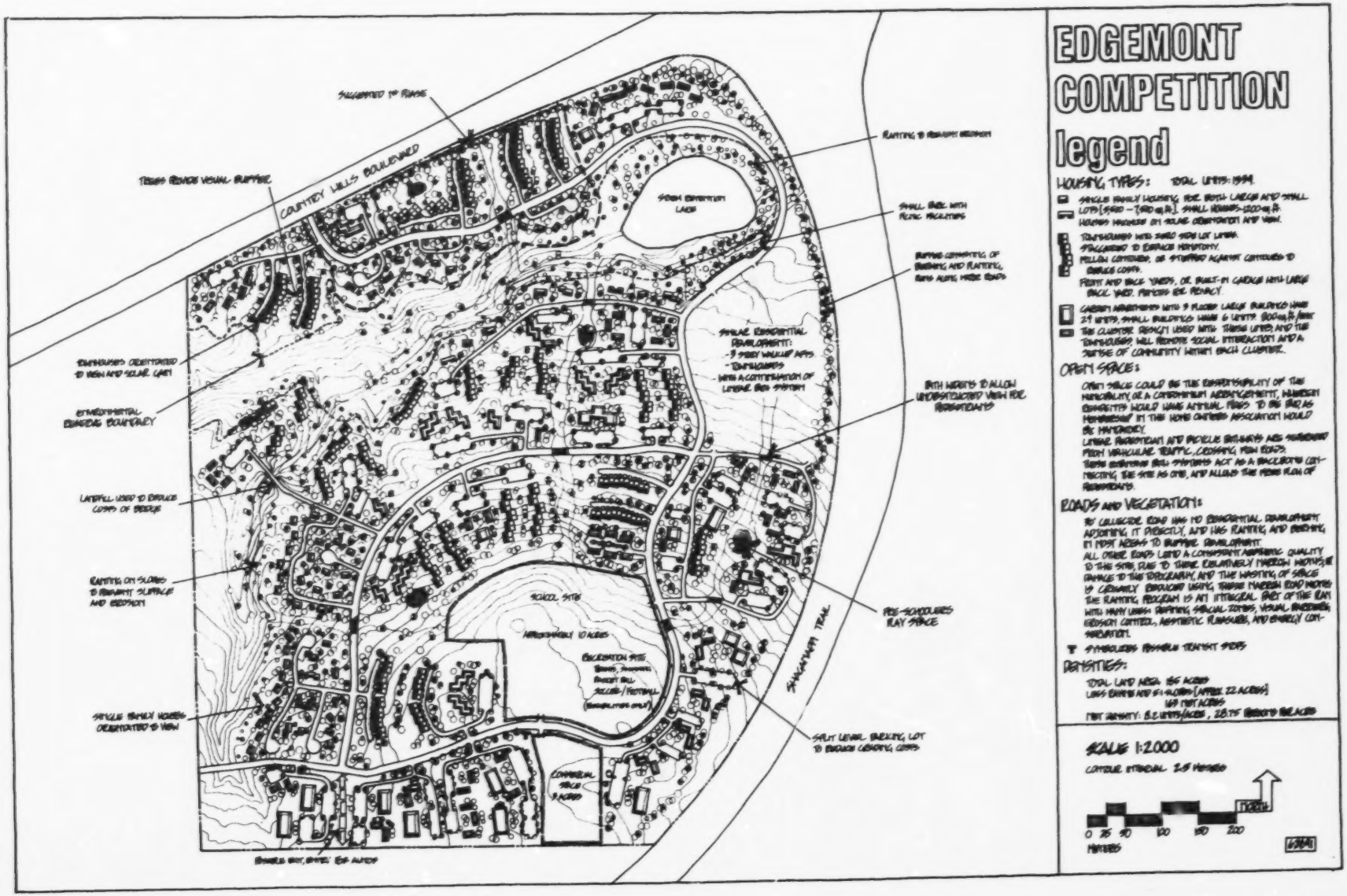
L. Guyn:
It is perhaps practical, depending upon economics. The multiple uses of land is a positive feature.

P. Hemingway:
This was a serious attempt to deal with site limitations, but it is not too imaginative.

R. Kinney:
Generally thoughtful housing groups, no real reference to an understanding of the site.

G. Steber:
Author has thought out a limited concept.





EDGEMONT COMPETITION

legend

HOUSING TYPES: TOTAL UNITS: 1994

- SINGLE FAMILY HOUSING, FOR BOTH LARGE AND SMALL LOTS (5,400 – 7,200 sq.ft.). SMALL HOUSES - 2200 sq.ft. HOUSES ORIENTED BY SOLAR CONSIDERATION AND VIEW.
- TOWNHOUSES WITH SMALL SIDE LOT LINES. STAGGERED TO ENHANCE HORIZONTALITY. YELLOW CONTOURS, OR SETBACKS AGAINST CONTOURS TO ENABLE CARS. FRONT AND BACK YARDS, OR BUILT-IN GARDEN WITH LARGE BACK YARD. PATIOS FOR PRIVACY.
- GARDEN APARTMENTS WITH 3 FLOOR LARGE BUILDING HAVE 24 UNITS, SMALL BUILDINGS HAVE 6 UNITS. 800 sq.ft. EACH. THE CLUSTERS PRIVACY USED WITH STAGGERED LAYERS, AND THE TOWNHOUSES WILL PROMOTE SOCIAL INTERACTION AND A SENSE OF COMMUNITY WITHIN EACH CLUSTER.

OPEN SPACE:

OPEN SPACE COULD BE THE RESPONSIBILITY OF THE MUNICIPALITY, OR A CONDOMINIUM ARRANGEMENT, HOWEVER CONSISTENCY WOULD HAVE ARTERIAL ROADS TO BE THE RESPONSIBILITY OF THE HOME OWNERS ASSOCIATION WOULD BE HANDICAPPED.
LINEAR PEDESTRIAN AND BICYCLE PATHWAYS ARE SEPARATED FROM VEHICULAR TRAFFIC, CROSSING MAIN ROADS. THESE PATHWAY SYSTEMS ACT AS A BACKBONE CONNECTING THE SITE AS ONE, AND ALLOW THE MAIN FLOW OF PEDESTRIANS.

ROADS AND VEGETATION:

80' COLLECTOR ROAD HAS NO RESIDENTIAL DEVELOPMENT ADJOINING IT DIRECTLY, AND HAS PLANTING AND BERMING IN MOST AREAS TO BUFFER DEVELOPMENT.
ALL OTHER ROADS USED A CONSISTENT ASPHALTIC QUALITY TO THIS SITE, DUE TO THEIR RELATIVELY SMOOTH MOVEMENT FAVABLE TO THE TOPOGRAPHY, AND THE WASTING OF SPACE BY CURBING. EXPOSED AGGREGATE CONCRETE WALKS ARE USED THROUGHOUT THE PLANTING PROGRAM IS AN INTEGRAL PART OF THE PLAN WITH MANY UNIQUE PLANTING, SPECIAL TREES, VISUAL BARRIERS, EROSION CONTROL, AESTHETIC PLEASURES, AND ENERGY CONSERVATION.

- SYMBOLIZES PROPOSED TRANSIT STOPS

DENSITIES:

TOTAL LAND AREA 156 ACRES
LESS SCHOOL AND 5% PUBLIC (APPROX. 22 ACRES)
149 NET ACRES
NET DENSITY: 8.2 UNITS/ACRE, 28.7% GROSS DENSITY

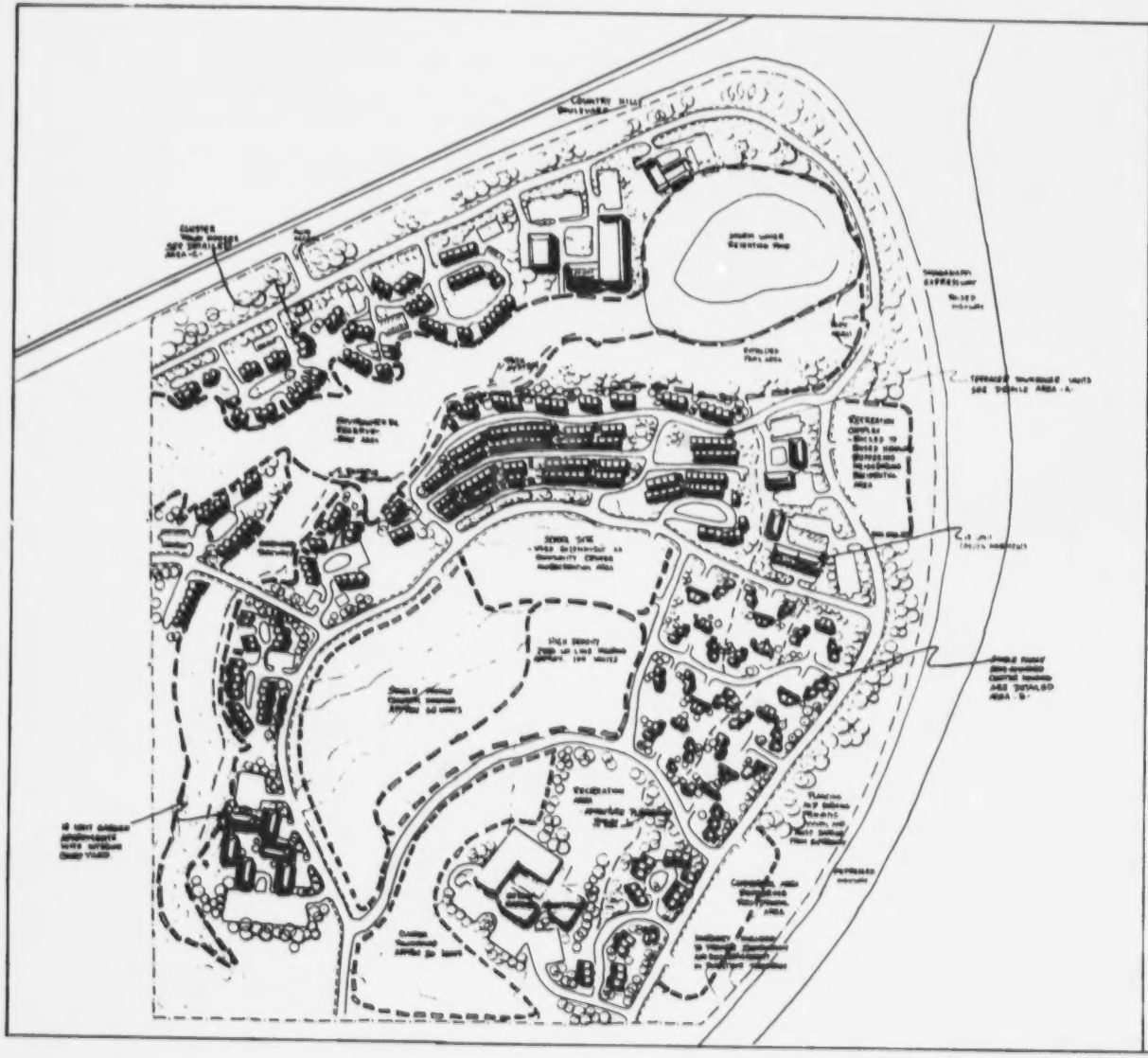
SCALE 1:2000

CONTOUR INTERVAL 2.5 METRES

0 25 50 100 150 200
METRES

BETH MacDONALD

DARTMOUTH, NOVA SCOTIA Student Award



EDGEMONT, ALBERTA SITE PLAN

SCALE 1:2000
CONTOUR INTERVAL 2.0 m

COMPETITION NUMBER 57117

GOALS AND OBJECTIVES

- TO ENCOURAGE NEIGHBOURHOOD CONCEPT THROUGH HOUSING ARRANGEMENT, SHARED OPEN SPACE, AND LANDSCAPE FEATURES, AND BY CENTERING DEVELOPMENT AROUND COMMUNITY ACTIVITY AREAS
- TO ENCOURAGE HETEROGENEOUS COMMUNITY THROUGH DIVERSITY OF HOUSING TYPES
- TO CREATE INTERESTING SPACES THROUGH HOUSING LAYOUT AND DESIGN PROVIDING PRIME AND PUBLIC SPACES
- TO PROVIDE AN ENVIRONMENT, QUIET AND SHELTERED FROM SURROUNDING EXPRESS ROUTES AND TO REDUCE THE EFFECT OF VEHICULAR TRAFFIC ON RESIDENTIAL AREAS
- TO RETAIN AND TAKE ADVANTAGE OF NATURAL AMMENITIES OF THE SITE AND TO DEVELOP ALTERNATE AND CREATIVE USE OF THE LAND

APPROXIMATE DENSITY 6.24 UNITS/ACRE

COMMUNITY ACTIVITY AREAS

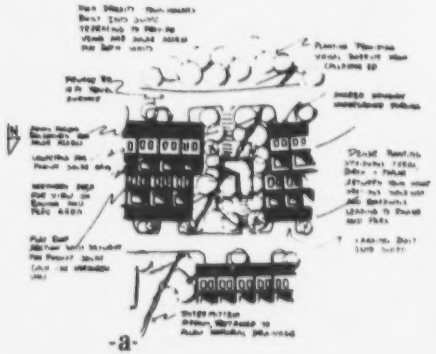
- EXTENDED PARK SYSTEM LINKING COMMUNITY: ALLOWS RECREATION, EXTENSIVE PATHS AND TRAILS THROUGHOUT, ACCESS PROVIDED ALL ALONG PARK BOUNDARY BY STREETS DOWN, PARK AREAS, SMALL PARKWAY NETWORK THROUGHOUT SITE LEADS TO RAVINE.
- MAJOR RECREATION COMPLEX, NOISE AND VISUAL BUFFER LOCATED NEAR PARK AREA TO LINK WITH DEDICATED TRAILS, GYM, WEIGHTS, POOL, RACKETBALL.
- SCHOOL SITE CLOSE PROXIMITY TO REC SITE, CENTRAL LOCATION OF SITE FOR STUDENT ACCESS, FIELD SPORTS, FOOTBALL, BASEBALL, SOCCER, EXTENSIVE COMMUNITY USE OF BUILDING.
- RECREATION SITE ADVENTURE PLAYGROUND, PASSIVE REC AREA

ROADS

- MAIN COLLECTORS - 30 ft TRAVEL SURFACE, ALLOW CONTOURS AND ENCOMPASS SITE, NO HOUSING BORDERS DIRECTLY ON COLLECTORS.
- PRIVATE RDS - 20 ft TRAVEL SURFACE, LESS TRAVELED, MAINTAINED BY CITY

BUFFERING

- MAJOR BUFFER AREA ALONG ARJACENT HIGHWAYS, NO RESIDENTIAL DEVELOPMENT ON HIGHWAY SIDE OF COLLECTOR RD RECREATION COMPLEX AND COMMERCIAL AREA ACT AS VISUAL AND SOUND BARRIER
- EXTENSIVE PLANTING AND BERMING PROVIDE VISUAL INTERIOR BUFFERS, AND WIND PROTECTION
- NURSERY LOCATED NEAR ENTRANCE OF SITE, PROMOTION AND EDUCATION OF PLANTING PROGRAM, SIMILAR PLANT SPECIES RECOMMENDED FOR ENTIRE SITE TO CREATE UNIFORM APPEARANCE



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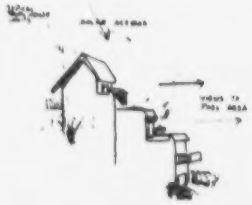

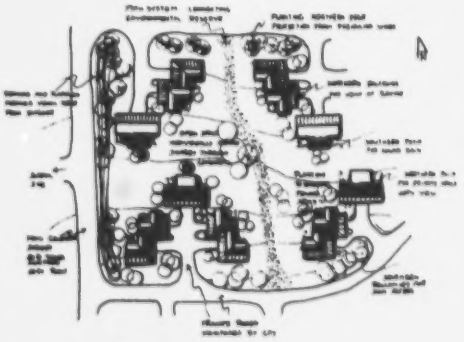

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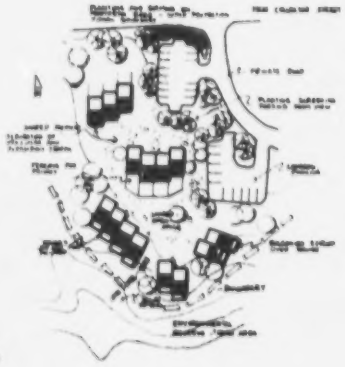

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EDGEMONT, ALBERTA
DETAILED AREAS

COMPETITION # 81117

HOUSING DENSITIES

	TOTAL UNITS	TOTAL AREA	NET DENSITY
SINGLE FAMILY SEMI-DETACHED	123	21.2	4.6
TOWNHOUSES ATTACHED	227	20.9	8.9
TOWNHOUSES ZERO-LOT-LINE	225	19.0	12.5
GARDEN APARTMENTS	400	19.9	22.9

HOUSING TYPES

SINGLE FAMILY SEMI-DETACHED
- CLUSTER ARRANGEMENT FOR NEIGHBOURHOOD GROUPINGS AND INTERESTING SPACE DEFINITION
- L-SHAPE PROVIDING PRIVATE AREAS AND SOLAR YARD
- HOUSING DESIGN ALLOWS TERRACING IF NECESSARY
- OWNERSHIP - FEE SIMPLE WITH COVENANTS FOR SHARED OPEN SPACE

TOWN HOUSES 2½ to 4
ZERO LOT LINE TERRACED HOUSING BACKED INTO STEEP SLOPES TAKING ADVANTAGE OF AND ENHANCING THIS NATURAL AMENITY
PARKING IN BASEMENTS, VEHICULAR ACCESS TO ALL UNITS - BALCONIES AND SKYLIGHTS FOR PRIVACY, VIEW, PASSIVE SOLAR GAIN.
- FEE-SIMPLE OWNERSHIP
- VEGETATED PATHWAYS THROUGH TERRACE.

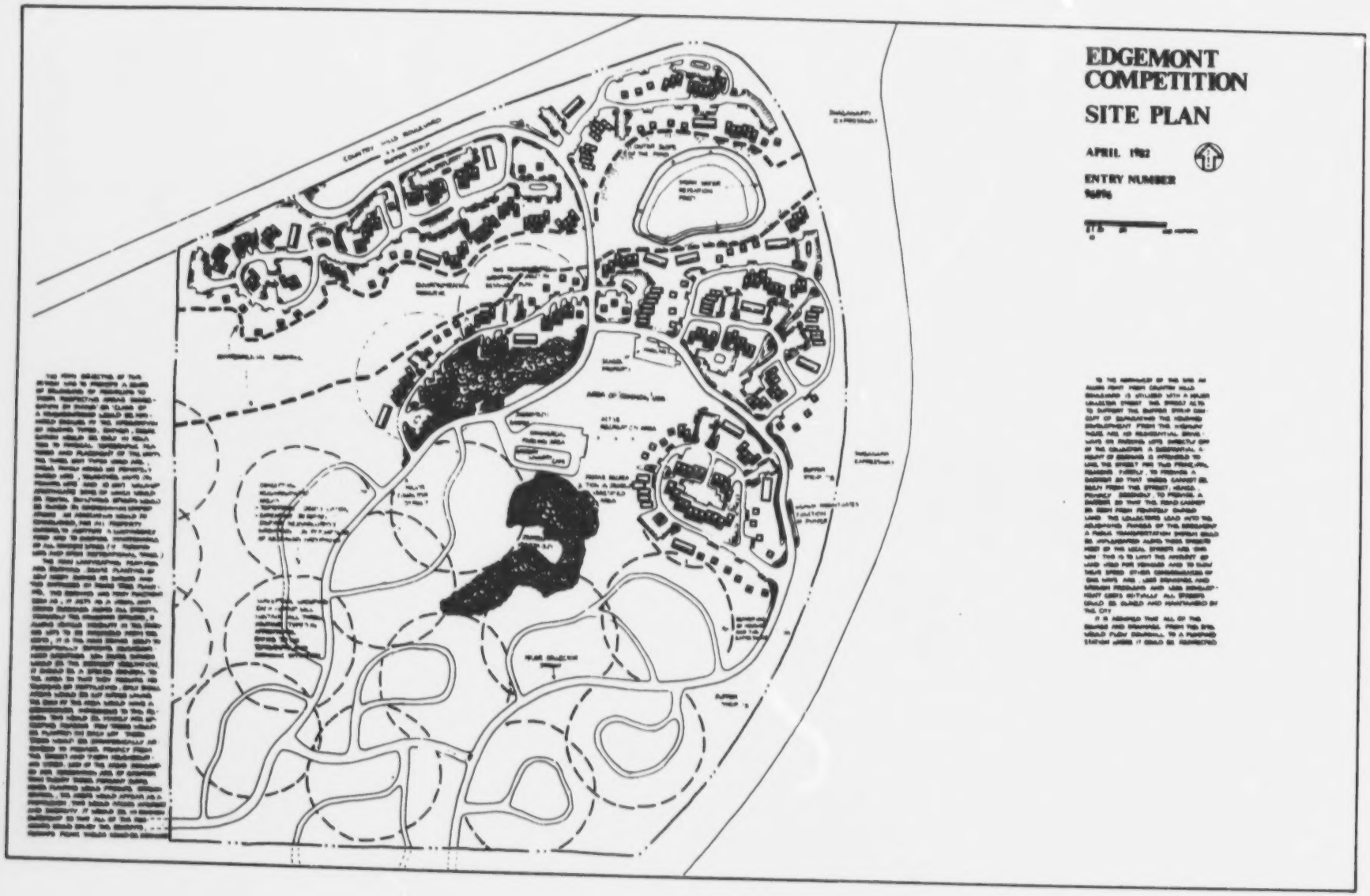
TOWN HOUSES 2½ to 4
- BUILT BACKED ONTO SLOPE TO CREATE SHELTERED SPACES AND ACCENTUATE NATURAL TOPOGRAPHY
- CLUSTERING FOR NEIGHBOURHOOD GROUPINGS
- DECKS FACING SLOPE PRIVACY, VIEW, SOLAR AREAS
- STAGGERED SET BACKS FOR PRIVACY
- SHARED PARKING AND OPEN SPACE.
- CONDOMINIUM TYPE ARRANGEMENT FOR MAINTENANCE OF COMMON LAND

GARDEN APARTMENTS 16 OR 24 UNITS
- ARRANGED IN CLUSTERS TO PROVIDE USEABLE ACTIVE OPEN SPACE
- SITUATED WITH FINE VIEWS
- STAGGERED ROOF TO PROVIDE PRIVACY
- TERRACE UNITS

ALL HIGHER DENSITY UNITS LOCATED IN CLOSE PROXIMITY TO LARGE OPEN AREAS

JANICE SNAIR

HALIFAX, NOVA SCOTIA **Student Award**

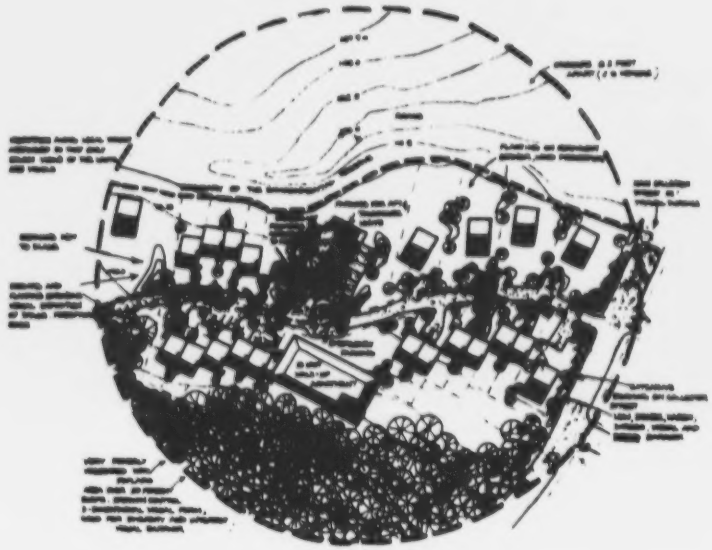


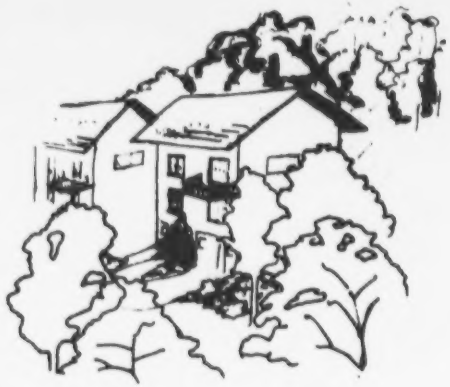
EDGEMONT COMPETITION

DETAIL PLAN

APRIL 1982

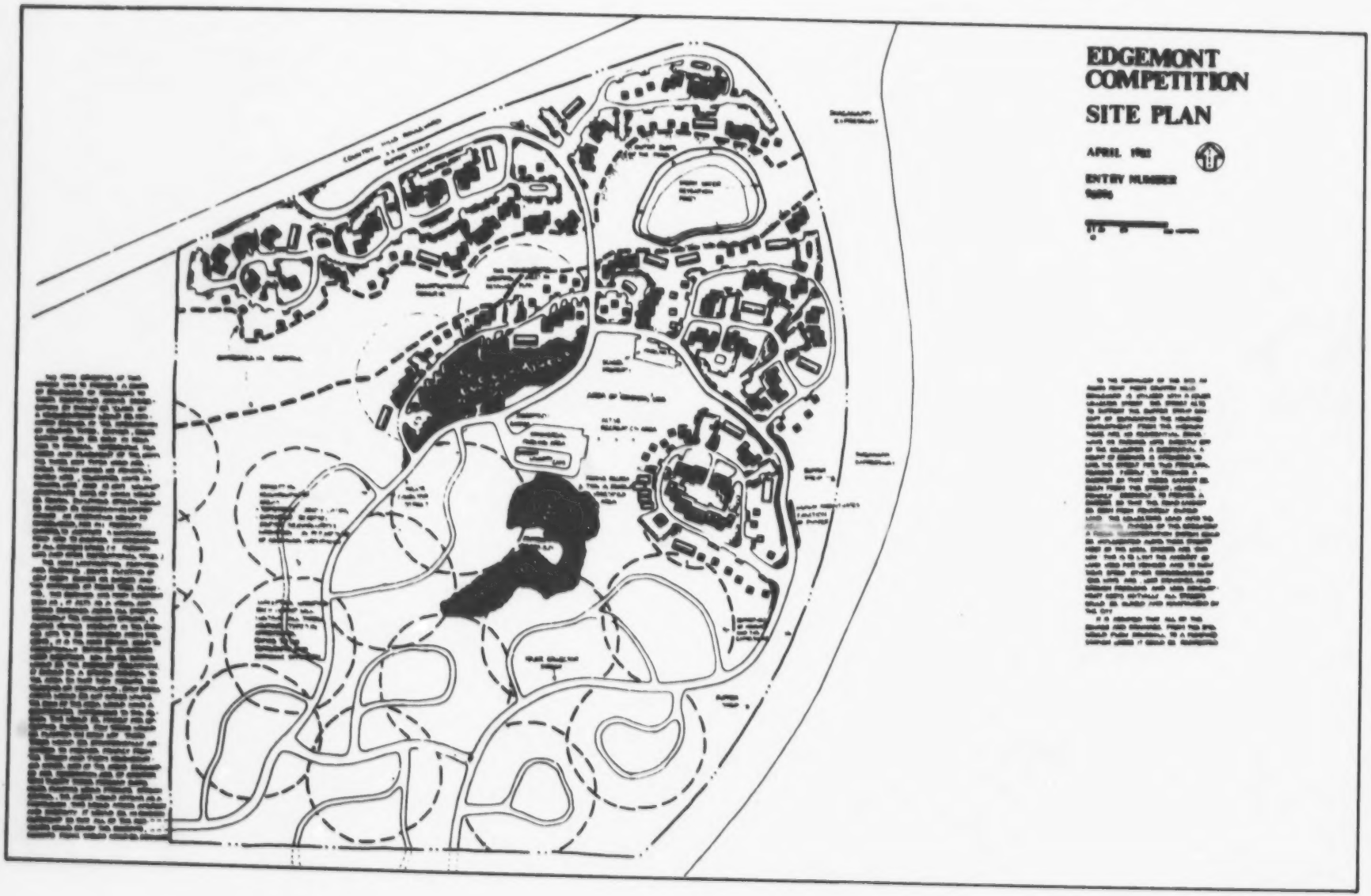
ENTRY NUMBER





JANICE SNAIR

HALIFAX, NOVA SCOTIA **Student Award**



EDGEMONT COMPETITION

DETAIL PLAN

APRIL 1962

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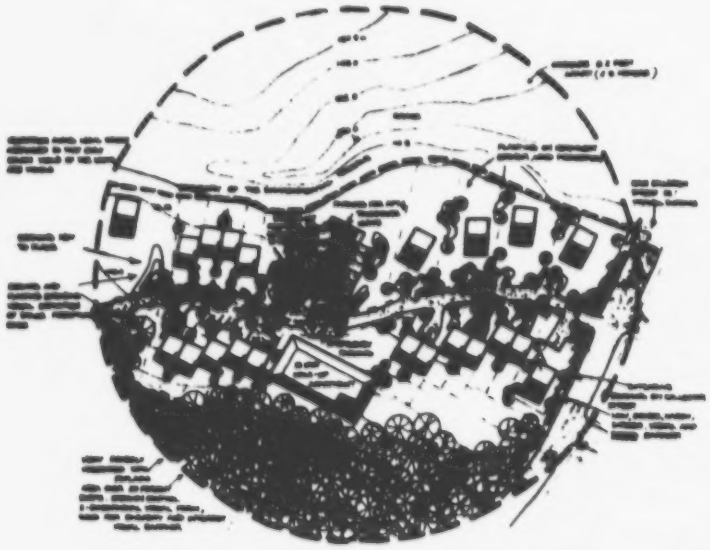


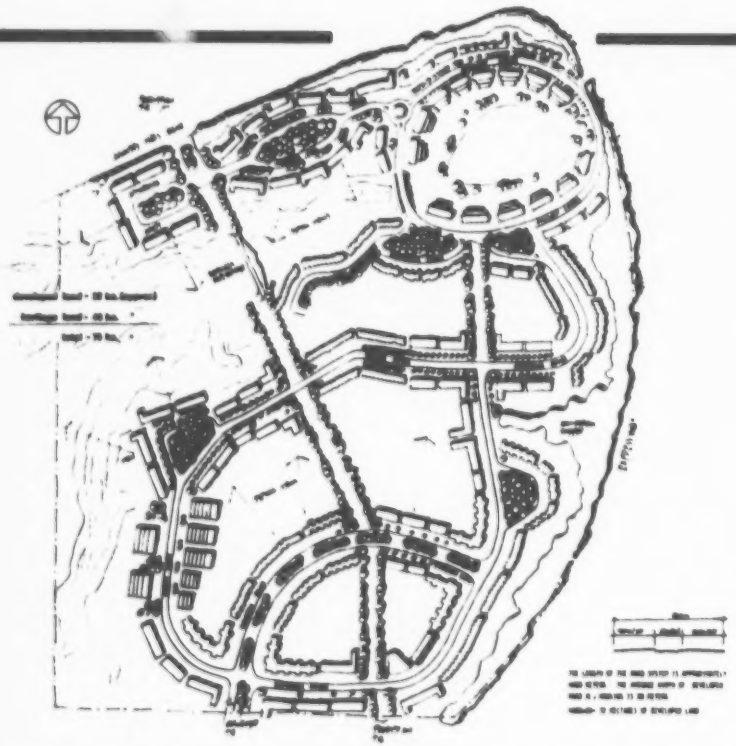
OTHER SUBMISSIONS OF INTEREST

These are not award winners but do present some interesting concepts.

JOHN HIX ARCHITECTS
TORONTO, ONTARIO

1

"THINK LINE"



heritage land preservation

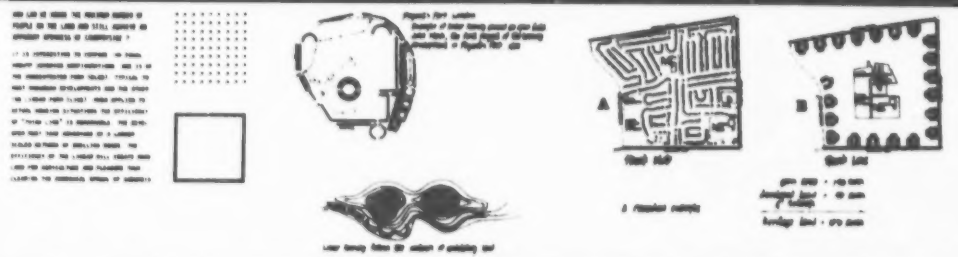
density

suburban dream

2

"THINK LINE"

geometry



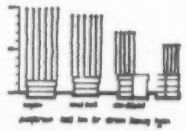
service & maintenance costs

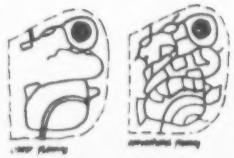
land preservation

community

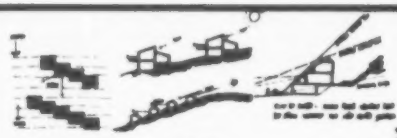
privacy

energy

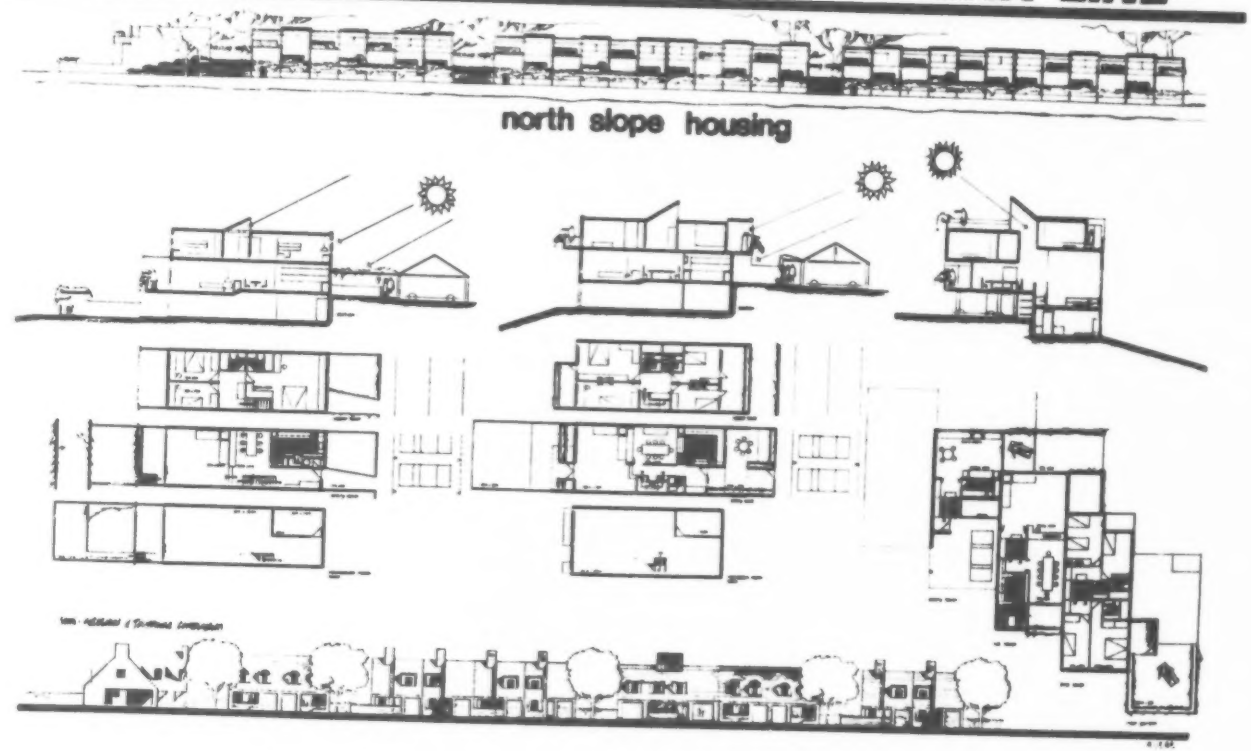




identity & the site



linear views



north slope housing

MAKALE & KYLLO PLANNING ASSOCIATES LTD.
BRIAN DODDS AND ASSOCIATES
G.C.G. ENGINEERING PARTNERSHIP

CALGARY, ALBERTA

FROST BRAMMAR ARCHITECTS LTD.
ENKO PLAN CONSULTANTS LTD.

PHILOSOPHY

TRADITIONAL DESIGN APPROACH

KEY DESIGN SOLUTIONS

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

PLANNING

1

43351

ADVANTAGES OF CONCEPT

- SIGNIFICANT REDUCTION IN CAPITAL COST OF
  - ROADS
  - SIDEWALKS
  - BURIED UTILITIES
  - LAND PER UNIT
  - PARKING
  - HOUSING
  - SCHOOLS AND COMMUNITY FACILITIES
- SIGNIFICANT REDUCTION IN OPERATING AND MAINTENANCE COSTS OF
  - ROADS
  - UTILITIES
  - TRANSPORTATION (PUBLIC & PRIVATE)
  - LANDSCAPING AND PARKS
  - PUBLIC BUILDINGS
  - PRIVATE BUILDINGS
  - POLICE PROTECTION
  - GARBAGE COLLECTION
  - RECREATION FACILITIES
- SALEABLE PRODUCT BECAUSE
  - MORE RESIDENCE AND COMMUNITY SERVICES
  - LOWER OVERALL COST
  - EXCELLENT VIEWS
  - PRIVACY ENHANCED
  - OPEN SPACE RELATIONSHIPS AND AESTHETICS ENHANCED
  - EFFICIENT AND INTEGRATED WORK FUNCTIONS
  - ACCESS TO SHOPPING, SCHOOLS, RECREATION
  - VARIETY OF HOUSING TYPES AND CONDITIONS
  - EVOLUTION OF DEVELOPMENT OVER TIME
  - PERCEIVED LOW DENSITY (EVEN THOUGH DENSITY IS RELATIVELY HIGH)
- DEVELOPER BENEFITS THROUGH
  - ABILITY TO ADJUST HOUSING TYPES AND DENSITIES
  - HIGHER DENSITY ON MOST DIFFICULT PORTION OF SITE, THEREBY AVOIDING MODIFICATION AND HIGHER COSTS
  - MODULAR DESIGN ALLOWS EASY PHASING OF CONSTRUCTION

DEPARTURE FROM STANDARDS AND TRADITIONAL METHODS

- ZONING FLEXIBILITY
  - MIXED USES
  - TRANSITION OF DENSITIES AND TYPES OF HOUSING
  - INTEGRATION OF PUBLIC AND PRIVATE SPACES
  - PLANNED UNIT DEVELOPMENT CONCEPT MAY BE NECESSARY
- DEPARTURE FROM STANDARDS
  - ROAD WIDTHS
  - SERVICE LANE CONCEPT
  - CENTRALIZED PARKING
  - PEDESTRIAN MOVEMENT

APPLICATION OF CONCEPT TO OTHER SITES

- TERRAIN FACTOR HAS
  - POTENTIAL TO APPLY TO OTHER HILLY TERRAIN IN CALGARY BUT MAY REQUIRE ADJUSTMENT FOR DIFFERENT ORIENTATION (I.E. SOUTH)
- PEDESTRIAN MOVEMENT HAS POTENTIAL
  - FOR MANY OTHER RESIDENTIAL, RECREATION AND COMMERCIAL SITUATIONS
- RESIDENTIAL MODULES AND TRANSITION APPROACH CAN BE APPLIED ELSEWHERE.
- OPEN SPACES AND AESTHETICS CAN ADD TO LIVABILITY OF MANY PROJECTS.
- SEPARATION OF VEHICLES AND PEDESTRIANS HAS MERIT FOR MANY PROJECTS.

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

PLANNING

2

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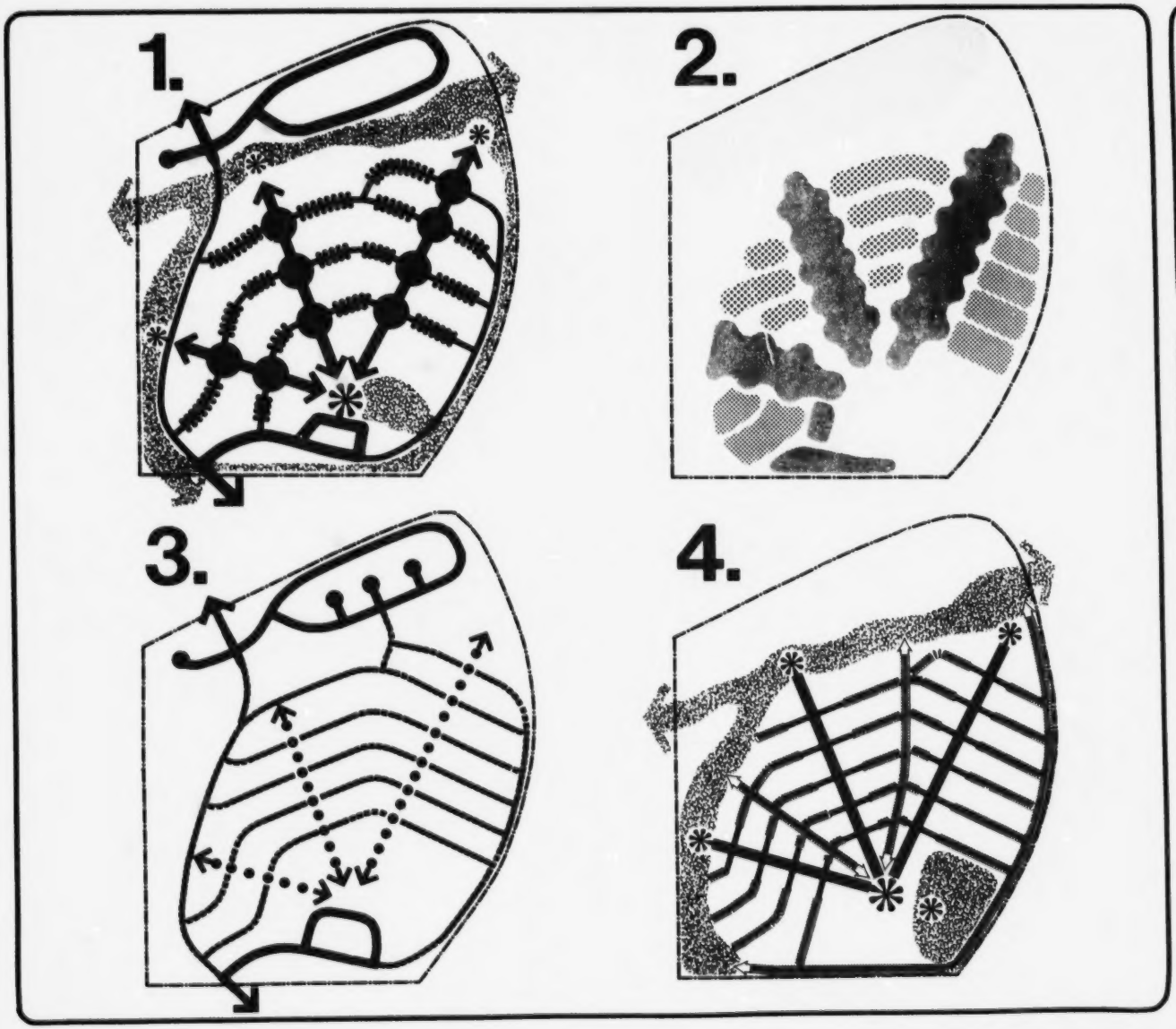
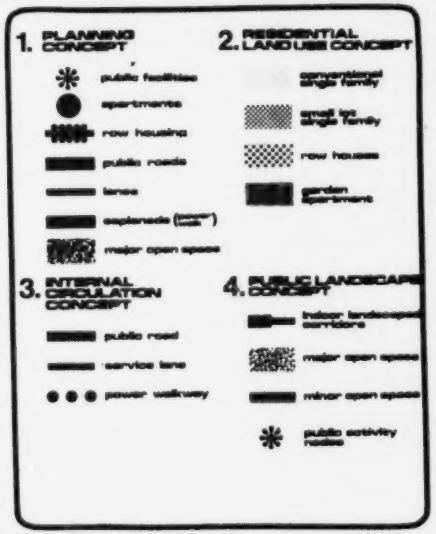


INNOVATIVE LAND AND HOUSING DESIGN COMPETITION



PLANNING

0 100 200 300m

3

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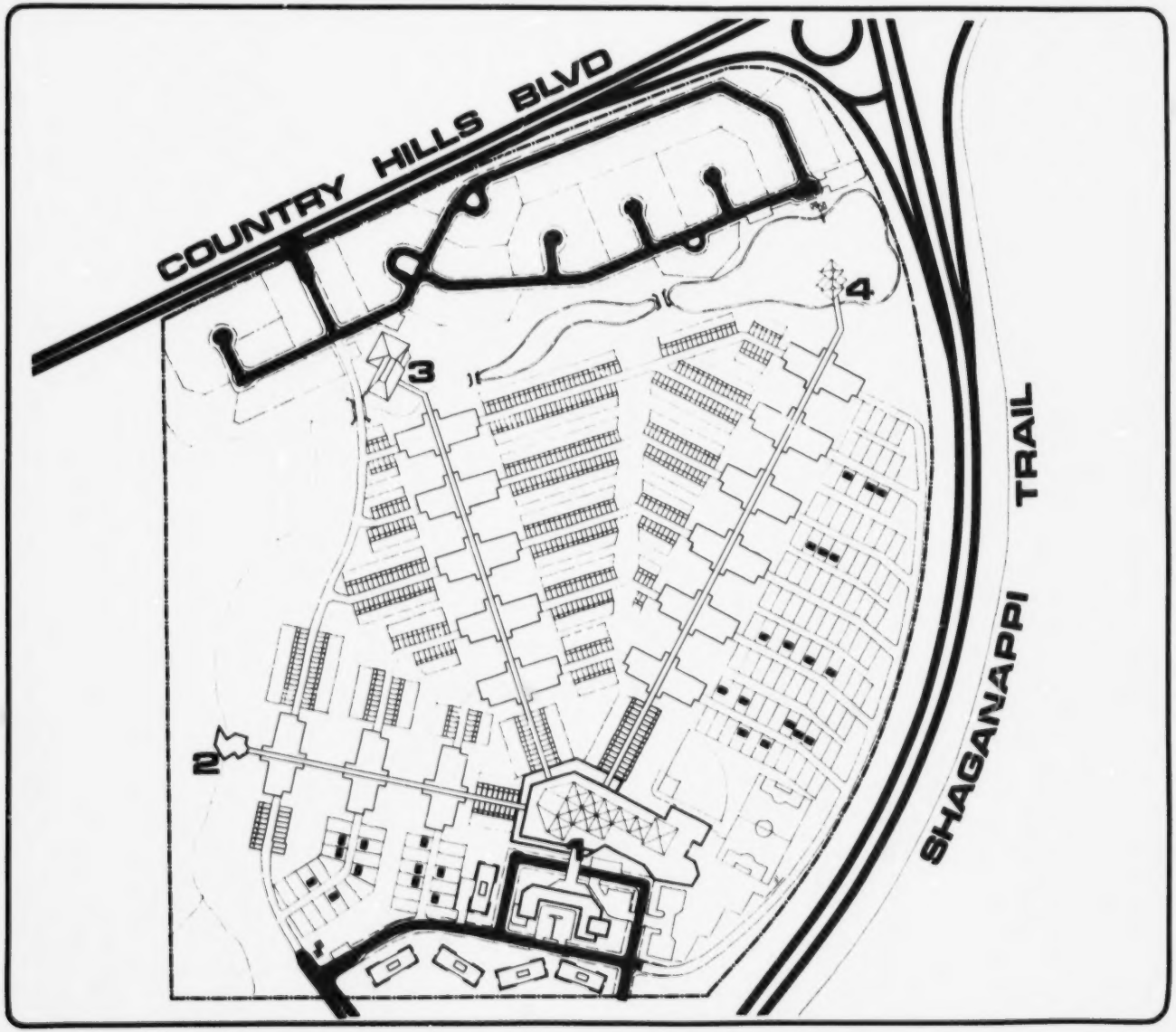
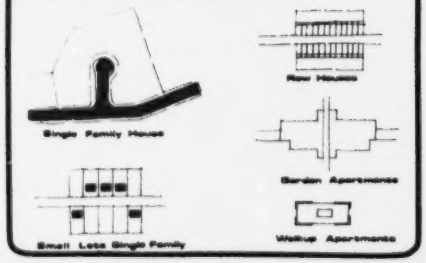
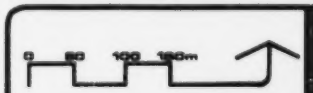


INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

1. CENTRAL COMMUNITY FACILITIES
   - . retail shopping
   - . offices
   - . school
   - . daycare
   - underground parking
2. SANCTUARY
3. INDOOR RECREATION
4. OUTDOOR RECREATION



PLANNING



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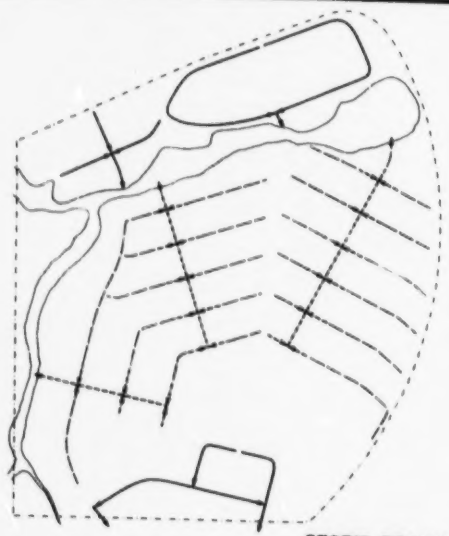
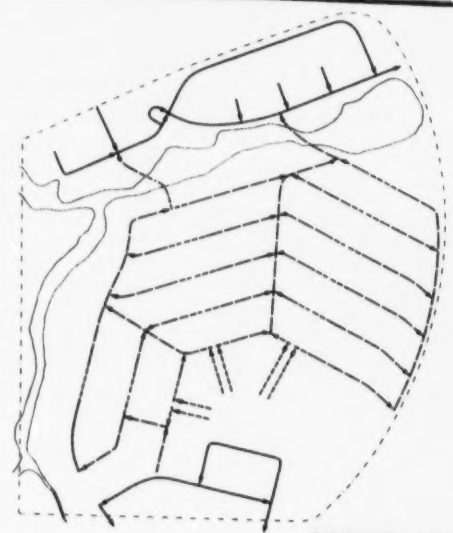
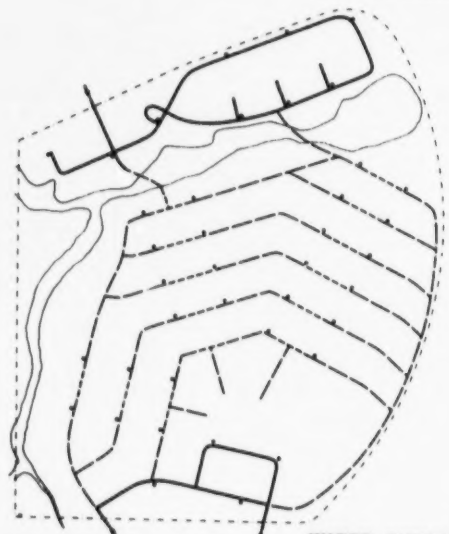


STORM DRAINAGE



SANITARY SEWAGE



WATER DISTRIBUTION

ACCESS

- PUBLIC ROADWAY SYSTEM ON UPPER PLATEAU AREA TO SERVICE COMMERCIAL/RETAIL AND RECREATIONAL FACILITIES
- PARKING STRUCTURES PROVIDED FOR ENTIRE RESIDENTIAL COMPLEX
- LIMITED ACCESS TO INTERNAL PRIVATE ROADWAY SYSTEM MAINTAINED BY ACTIVATED BARRIER GATES
- INTERNAL PRIVATE ROADWAY SYSTEM FOR EMERGENCY SERVICE VEHICLES AND OCCASIONAL LOCAL RESIDENT USE ONLY
- PEDESTRIAN MOVEMENT ENCOURAGED BY ENCLOSED POWER SIDEWALKS RISING UP/DOWN SLOPE AT THREE STRATEGIC LOCATIONS AND CORRIDOR DEVELOPMENT LATERALLY AT SPACED INTERVALS
- CONVENTIONAL SUBDIVISION DEVELOPMENT ON NORTH SIDE OF CREEK

WATER DISTRIBUTION

- PUBLIC NETWORK FOR SERVICE TO UPPER PLATEAU AND CONVENTIONAL SUBDIVISION AREA
- PRIVATE DISTRIBUTION INTERNALLY ... MAJOR PERIPHERAL FEEDER LOOP AND DISTRIBUTION MAINS RUNNING TRANSVERSELY ACROSS THE SLOPE WITHIN PRIVATE STREETS
- HYDRANTS STRATEGICALLY LOCATED AT INTERFACE BETWEEN HIGHER DENSITY AND LOWER DENSITY DEVELOPMENT
- WATER MAINS WITH ADEQUATE FROST COVER IN PRIVATE STREETS WITH SPECIAL ATTENTION TO DEPRESSED ALIGNMENT BENEATH BUILDI...S
- PRESSURE REDUCTION ZONES AS REQUIRED
- INDIVIDUAL OR COMMON SERVICE CONNECTIONS AS REQUIRED

SANITARY SEWAGE

- PUBLIC GRAVITY NETWORK FOR SERVICE TO UPPER PLATEAU AND CONVENTIONAL SUBDIVISION AREAS
- PRIVATE GRAVITY NETWORK WITH TWO MAIN COLLECTORS ALONG THE PERIPHERAL LOOP ROADWAYS AND TWO SUB-COLLECTORS WITHIN GREEN SPACE CONNECTORS
- LATERALS TO RUN TRANSVERSELY WITHIN PRIVATE STREETS
- SANITARY SEWERS WITH ADEQUATE COVER TO SERVICE FRONTING BUILDING DEVELOPMENT ON BOTH UPSLOPE AND DOWNSLOPE SIDES
- SANITARY SEWERS TO TERMINATE UPSTREAM AT HIGHER DENSITY DEVELOPMENT WHERE INTERNAL PLUMBING TO CONTINUE THEREIN

STORM DRAINAGE

- INTEGRATION OF STORM WATER DETENTION REQUIREMENTS INTO CREEK/POND DEVELOPMENT
- PUBLIC GRAVITY NE... ORK TO SERVICE UPPER PLATEAU AND CONVENTIONAL SUBDIVISION AREAS
- PRIVATE GRAVITY NETWORK WITH THREE MAIN COLLECTORS RUNNING WITHIN THE SLOPED PEDESTRIAN CORRIDORS FACILITATING DRAINAGE OF D...RESSED ROADWAY LOCATIONS AND TRANSVERSE EXT...SIONS FOR AREA DRAINAGE PURPOSES
- SPILLWAY DESIGN REQUIRED AT BASE OF SLOPE TO REDUCE FLOW VELOCITIES AND PREVENT EROSION AT OUTFALL LOCATIONS

SOLID WASTES

- PRIVATE COMMERCIAL COLLECTION FOR UPPER PLATEAU DEVELOPMENT
- PRIVATE COMMERCIAL COLLECTION FOR RESIDENTIAL COMPLEX AT CENTRALIZED LOCATIONS
- PUBLIC COLLECTION FOR CONVENTIONAL SUBDIVISION AREA

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

LEGEND

- PUBLIC NETWORK
- PRIVATE NETWORK (IN STREETS)
- PRIVATE NETWORK (UNDER BUILDINGS)

ENGINEERING

0 100 200 300m

5

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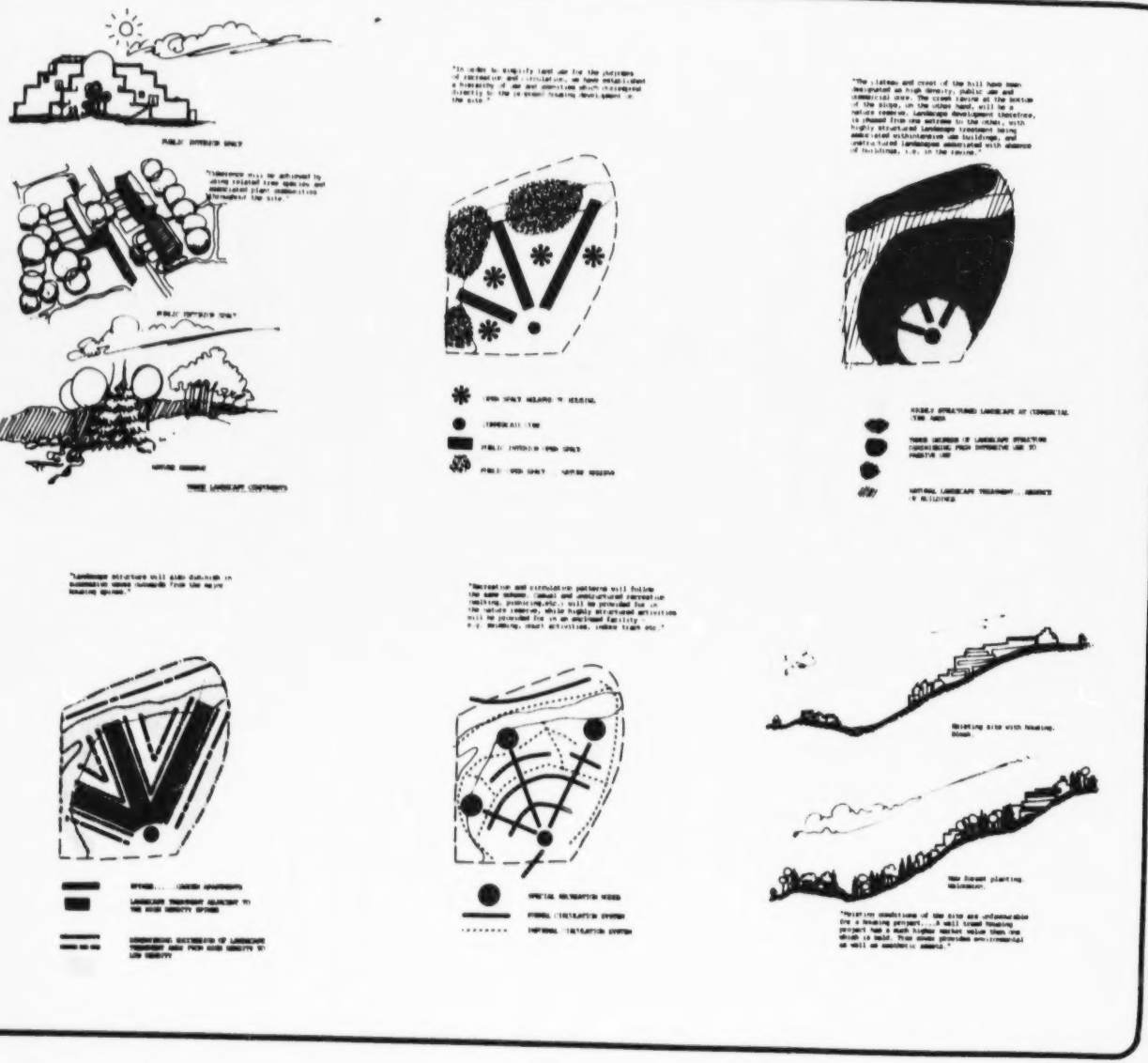

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

THE LANDSCAPE CONCEPT IS TO FILL AN OTHERWISE EMPTY SITE.
OUR GOALS ARE: AESTHETICS, RECREATION, PROTECTION AND MINIMAL MAINTENANCE.
THEREFORE, PROPOSAL: THAT THE LAND BE TREATED AS A FOREST MANAGEMENT SITE BY ESTABLISHING AN ASPEN/SPRUCE SUCCESSION LANDSCAPE.

THERE ARE THREE LANDSCAPE COMPONENTS:
- INTERIOR PUBLIC SPACE
- EXTERIOR PUBLIC SPACE
- NATURE RESERVE

THE LANDSCAPE DEVELOPMENT IS RANGED FROM INTENSIVE USE TO INTERMITTENT USE.
- INTERIOR PUBLIC SPACE = INTENSIVE USE
- EXTERIOR PUBLIC SPACE = INTERMEDIATE USE
- NATURE RESERVE = INTERMITTENT USE

RECREATION SERVICES WILL CORRESPOND DIRECTLY TO EACH LANDSCAPE COMPONENT.
- INTERIOR PUBLIC SPACE = BUILT PHYSICAL FITNESS FACILITIES
- EXTERIOR PUBLIC SPACE = PUBLIC PARKS
- NATURE RESERVE = NATURE TRAILS

A WALKING SYSTEM IS PROVIDED THROUGHOUT.

LANDSCAPE

6

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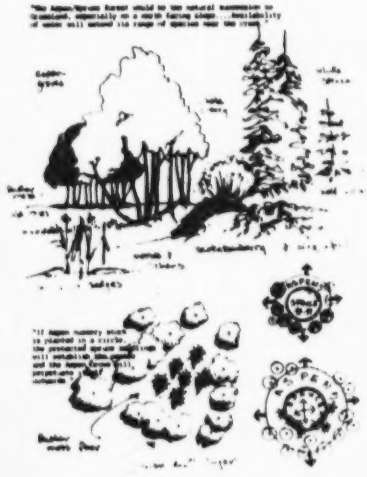

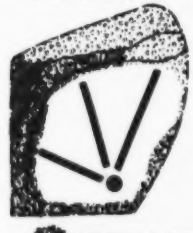

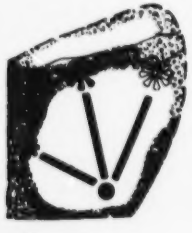

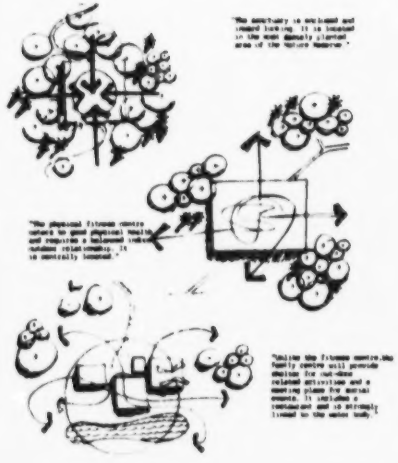

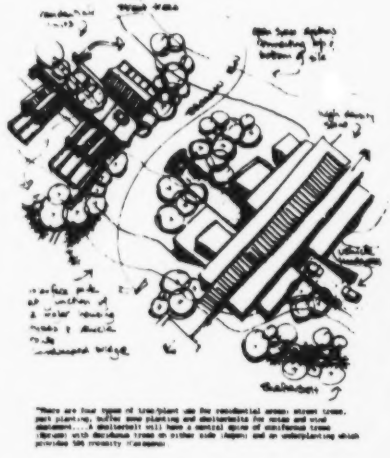

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

NATURAL ADVANTAGES OF THE EXISTING SITE

- NORTH FACING SLOPE PROVIDES PROTECTION FROM DRYING CHINOOK WINDS, THEREFORE A GREATER RANGE OF PLANT LIFE WILL SURVIVE.
- CREEK RAVINE OFFERS AESTHETIC AND ECOLOGICAL DIVERSITY.
- SLOPE OFFERS POTENTIAL FOR DOWNHILL RECREATION.

AESTHETIC DISADVANTAGES

- SITE IS EXPOSED TO COLD PREVAILING WINDS IN WINTER.
- CIRCULATION IS IMPEDED.
- SITE IS DIVIDED BY CREEK.
- LITTLE EXISTING VEGETATION.

THEREFORE, FROM THE ABOVE:

1 (A) PROVIDE PROTECTION FROM PREVAILING WINDS THROUGH GOOD ARCHITECTURAL DESIGN AND PLANTED WIND BREAKS.
DEVELOPMENT: WIND BREAKS PROVIDE AN AESTHETIC AMENITY.

2 (A) LIMIT VEHICLE CIRCULATION AND ENHANCE PEDESTRIAN ROUTES.
DEVELOPMENT: LIMITED TO ROADS AND SOME VEHICLE TRAFFIC.

PEDESTRIAN CIRCULATION TAKES ON NEW IMPORTANCE.
DEVELOPMENT: WELL USED PEDESTRIAN SYSTEMS PROMOTE GOOD SOCIAL AND PHYSICAL WELL BEING.

3 (A) CONSERVATE LANDSCAPE AND RECREATION DEVELOPMENT IN THE RAVINE.
DEVELOPMENT: THE RAVINE PROVIDES AN INTERIOR FOCUS FOR THE SITE AND INCREASED RECREATION POTENTIAL.

4 (A) SITE CLEARING WILL BE REQUIRED.
DEVELOPMENT: ENVIRONMENTALISTS WILL GREET A REFORESTATION PROGRAM ENTHUSIASTICALLY.

LANDSCAPE

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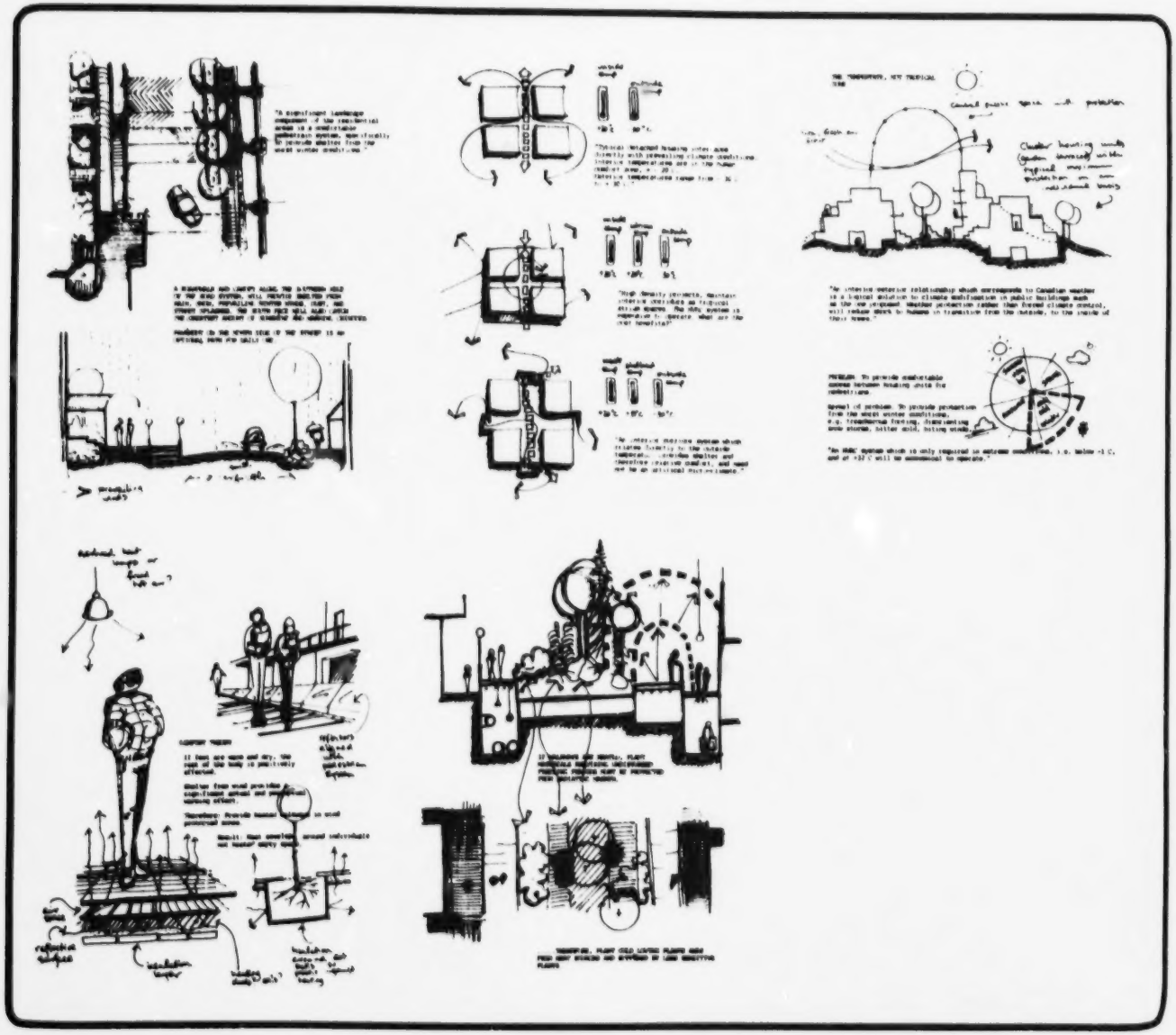

INNOVATIVE LAND AND HOUSING DESIGN COMPETITION

INTERIOR PUBLIC SPACE

- DEVELOP INTERIOR SPINE TO PROVIDE PROTECTION FROM THE EXTREMES OF WEATHER.
- DO NOT CREATE A TROPICAL ZONE!
- CREATE AN INTERIOR/EXTERIOR TEMPERATE ZONE WHICH FLUCTUATES IN ACCORDANCE WITH OUTSIDE CONDITIONS.
- USE TEMPERATE ZONE PLANT MATERIAL: (SEE ALSO: FUTURE CONSERVATORY, EDMONTON, TEMPERATE GREEN HOUSE)
- LINK THIS SPINE WITH ADJACENT LAND USES AT NODES.

EXTERIOR PUBLIC SPACE

- PROVIDE DIRECTION, PROTECTION AND SPATIAL DEFINITION.
- PUBLIC PARKS ESPECIALLY AT LINKING NODES.
- WINDBREAKS.
- OPEN, DOWNHILL SPACE FOR RECREATION.
- PROTECTED WALKING SYSTEM TO AND FROM NODES.
- EXTENSIVE WALKING SYSTEM CHAMPED THROUGH ENTIRE SITE, SUITABLE ALSO FOR HANDICAPPED PEOPLE.

NATURE RESERVE

- PROVIDE NURSERY PLANTING (ASPENS) TO SHELTER WHITE SPRUCE SEEDLINGS, - SPONSOR FIRE FOREST ECOLOGY.
- TRAIL SYSTEM FOR HIKING AND CROSS COUNTRY SKIING THROUGHOUT.
- WATER SYSTEM FOR STORM CONTROL AND RECREATION.
- NATURE RESERVE ECOLOGY TO PENETRATE AND ENCOMPASS HOUSING SITE.

LANDSCAPE

8

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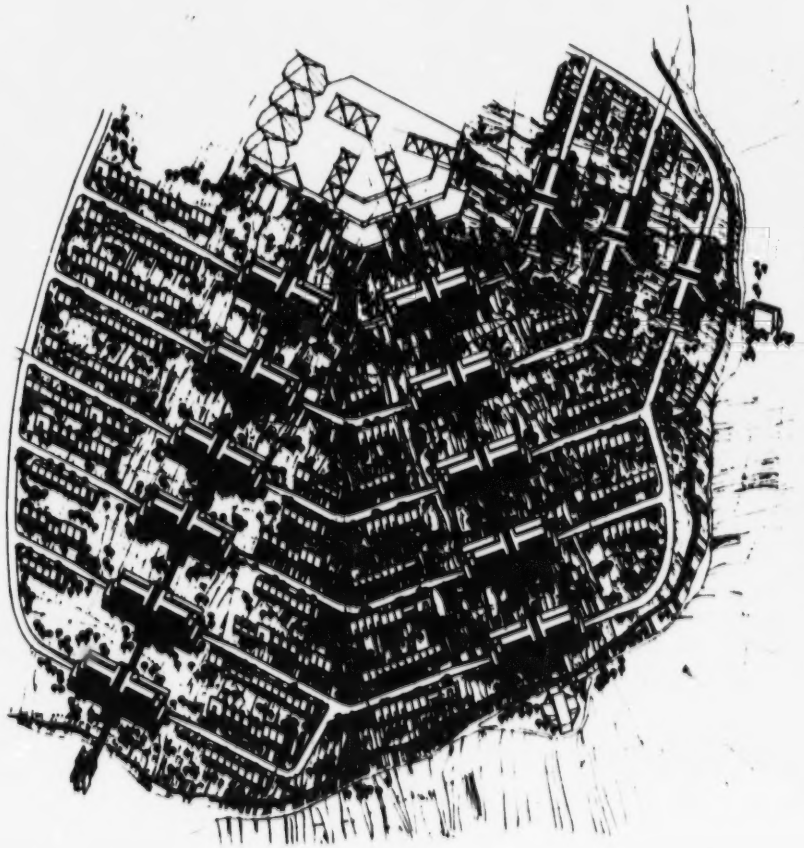
INNOVATIVE LAND AND HOUSING DESIGN COMPETITION



IN A WORLD IN WHICH OVER SIX MILLION SCIENTIFIC DISCOVERIES ARE MADE EACH YEAR, AND THE ACCUMULATION OF HUMAN KNOWLEDGE IS ON A EXPONENTIAL CURVE AND AT PRESENT IS DOUBLING IN LESS THAN SEVEN YEARS, THE HOUSING MARKET IS BECOMING EXTREMELY COMPETITIVE AND YET WE ARE ESSENTIALLY BUILDING AS WE HAVE FOR DECADES. HIGH TECHNOLOGY WHICH IS COMMON PLACE IN INDUSTRY, IS VERY SLOW TO MAKE ITS WAY INTO THE HOUSING MARKET. AT SOME POINT IN THE NEAR FUTURE, SYSTEMS SUCH AS FIBRE OPTICS, AND COMPUTERS WILL BE COMMON PLACE IN THE HOME. THE RELATIONSHIP OF HIGH TECHNOLOGY TO THE CONSTRUCTION AND FUNCTION OF THE HUMAN HABITAT MUST BE STUDIED AND ANALYZED SO THAT THE CHANGES ABOUT TO OCCUR CAN BE ANTICIPATED AND PROVIDED FOR. THE HOUSING INDUSTRY MUST FOLLOW THE COURSE OF ACTION RATHER THAN REACTION. WE BELIEVE THAT ARCHITECTURAL APPROACH TO THIS DEVELOPMENT WOULD INVESTIGATE HIGH TECHNOLOGY AND ADJUST PRESENT AND FUTURE APPLICATIONS TO THE HOUSING INDUSTRY, AND USE STATE OF THE ART TECHNOLOGY IN TERMS OF COMPUTER ASSISTED DESIGN AND DRAFTING (CADD) TO MONITOR AND CONTROL THE PLANNING PRINCIPLES AND THE ARCHITECTURAL CONCEPTS. IN THIS WAY THE PLANNING CONTROLS SUCH AS DENSITIES, PEDESTRIANS, LANDING, DRAINAGE, SUN ORIENTATION, VIEW AND PRIVACY, CAN BE RELATED TO THE MICRO ENVIRONMENT OF EACH RESIDENCE.

THROUGH THE USE OF CADD, THE INDIVIDUAL CHARACTERISTICS OF EACH BUILDING SITE WITHIN THE OVERALL COMPLEX CAN BE APPLIED TO THE DESIGN OF EACH HOUSING UNIT.

THROUGH THE CONTROLLED USE OF COMPUTING, BOTH THE PLANNING AND ARCHITECTURAL PRINCIPLES INCLUDING STRUCTURAL, MECHANICAL, ELECTRICAL, AND ENERGY SYSTEMS CAN THEN BE APPLIED TO THE DEVELOPMENT OF THE HOUSING SYSTEM WHICH MAXIMIZES THE EFFICIENCY OF SITE USE, CARRIES OUT ARCHITECTURAL CONCEPTS AND MAINTAINS ECONOMIC FEASIBILITY.

THE INFORMATION GATHERED AND STORED BY COMPUTER CAN THEN BE ADAPTED TO THE OVERALL PROJECT MANAGEMENT OF THE DEVELOPMENT IN TERMS OF SCHEDULING, COST CONTROL, MATERIALS TAKE OFF AND INVENTORY.

ALTHOUGH THIS IS AN EXTREMELY SIMPLIFIED DESCRIPTION OF COMPUTER APPLICATION IN LAND USE PLANNING, ARCHITECTURE, AND PROJECT MANAGEMENT, THE FACT REMAINS THAT SUCH AN APPROACH WOULD BE INSTRUMENTAL IN CREATING A MORE COMPREHENSIVE AND COST EFFECTIVE PROJECT.

ARCHITECTURE

9

43351

PHILOSOPHY

The affordable housing problem has been examined from a wide range of viewpoints. The most commonly used approaches have been to reduce the size of the units and lot, to rationalize the manufacturing process, to improve the financing mechanism, and so on.

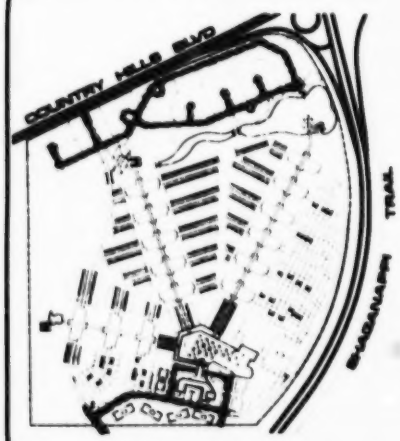
The philosophy of this proposal is to integrate the most significant elements which characterize a desirable and attractive human environment in an economically feasible solution including: economy of land use, economy of design and construction, quality living environment, utilization of energy conservation, integrating a wide range of urban functions, variety of housing types, etc.

We have the technology and we have the knowledge to improve the specific design of each single unit but that is not the key solution. We submit that a key solution to meet the shelter crisis rests on the physical organization of the neighbourhood. Reorganizing the space and services required for regular urban activities, supplemented by savings in the housing unit, holds the most promise.

Currently, urban residential subdivisions have housing units organized around an expensive road network. To what extent is this road network inside residential areas really essential?

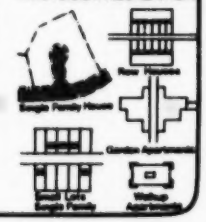
We propose that it is possible to reduce the overall cost of a residential project if we achieve economies of scale and efficient use of land and services and if we integrate housing functions with other urban functions, all the while concentrating on a quality urban environment.

To date, highrise housing projects have led the way in achieving integration of functions and economic efficiency but have sacrificed ground contact and the quality of the living environment. Conversely, the single family home is inefficient but has a better family environment.

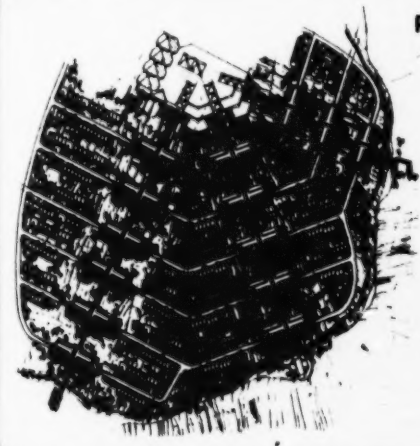


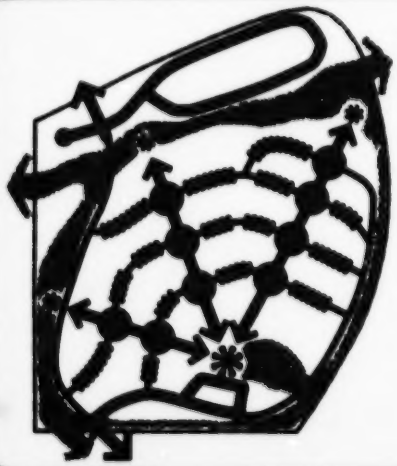
LAND USE PLAN

1. CENTRAL COMMUNITY FACILITIES:
   - retail shopping
   - offices
   - school
   - daycare
   - underground parking
2. SANCTUARY
3. INDOOR RECREATION
4. OUTDOOR RECREATION



PERSPECTIVE





PLANNING CONCEPT

- public facilities
- apartments
- row housing
- public roads
- lanes
- esplanade (power walk)
- major open space

THE PROPOSAL

Our recommended solution links the efficiency of the highrise with the desired living environment of the single family neighbourhood by economically reorganizing the distribution of housing and associated facilities and by re-thinking the internal circulation pattern for people and goods. The essence of the design:

- Integrates public functions (education, recreation, shopping, work, personal services) into four activity centres
- Links these through three enclosed, landscaped pedestrian movement corridors, "Esplanades", equipped with power sidewalks (similar to the elevator in a highrise)
- Locates a wide variety of housing types along each Esplanade with an outward transition from medium density garden apartments, through row houses, to zero-lot line detached homes based on a maximum separation of 300 meters (1,000 feet)
- Incorporates available power sidewalk equipment as presently used by Toronto Transit System and Mirabel Airport
- Provides fast, safe, high volume horizontal or inclined transport up to 20% slope, continuous or interrupted
- Provides a wealth of open spaces having different character and functions ranging from private yards, courts and balconies, to outdoor pedestrian lanes, to hiking and ski trails, to natural areas
- Provides paved, outdoor pedestrian corridors that function also as private access for delivery of goods, handicapped and emergency
- Eliminates the need for wide public roads serving the private auto by providing a centralized parking structure quickly accessible from the Esplanade (similar to the highrise)
- Allows most utilities to be constructed internal to the structures, not as independent, buried units
- Establishes an individual identity for each housing unit and a sub-neighbourhood identity for each module
- Integrates the built environment with the character of the terrain by the terraced nature of the structures and by extensive landscaping of the open space system
- Provides accommodation for a wide range of incomes, family structures and housing aspirations
- Allows each module to be completed as a unit thereby providing a timely mix of housing types and residents
- Allows density and house design changes to be made from one module to another without detracting from the overall character and quality
- Provides cost savings because of reduced amount of single-function roads, reduced amount of buried utilities and increased housing yield
- Accommodates higher residential densities, easily 40 to 50 units per acre (100 - 125 uphe), but still maintaining an exceptional living environment

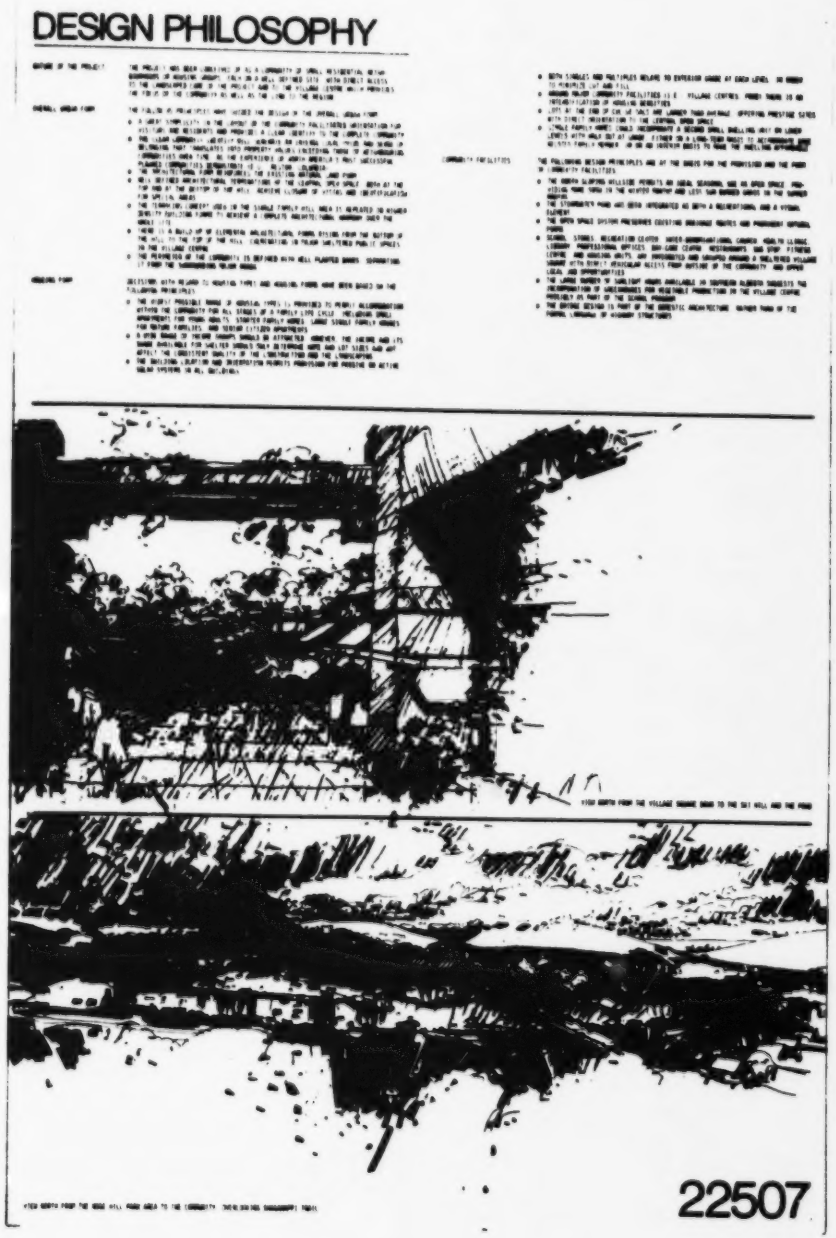
CALGARY INNOVATIVE LAND & HOUSING DESIGN COMPETITION

SYNOPSIS

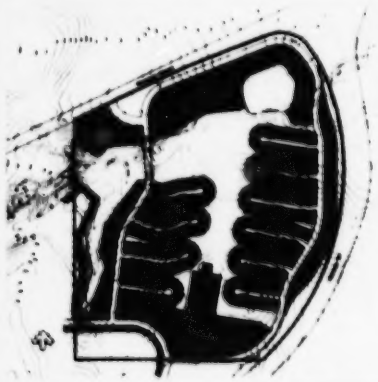
MAKALE & KYLLO PLANNING ASSOCIATES LTD. – Planning & Urban Design
BRIAN DODDS AND ASSOCIATES LTD. – Landscape Architecture
G.C.G. ENGINEERING PARTNERSHIP – Municipal & Transportation Engineering
FROST BRAMMAR ARCHITECTS LTD. – Architecture
ENKOPLAN CONSULTANTS LTD. – Urban Design

PROCTOR REDFERN BUTLER & KREBES CONSULTANTS LIMITED

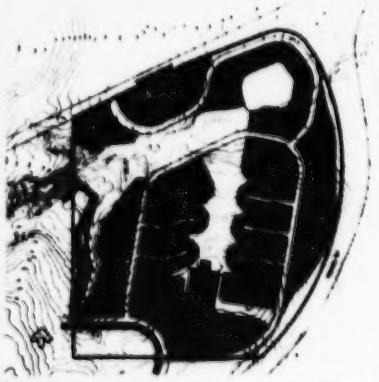
CALGARY, ALBERTA



FLEXIBILITY



MODIFICATION A



MODIFICATION B

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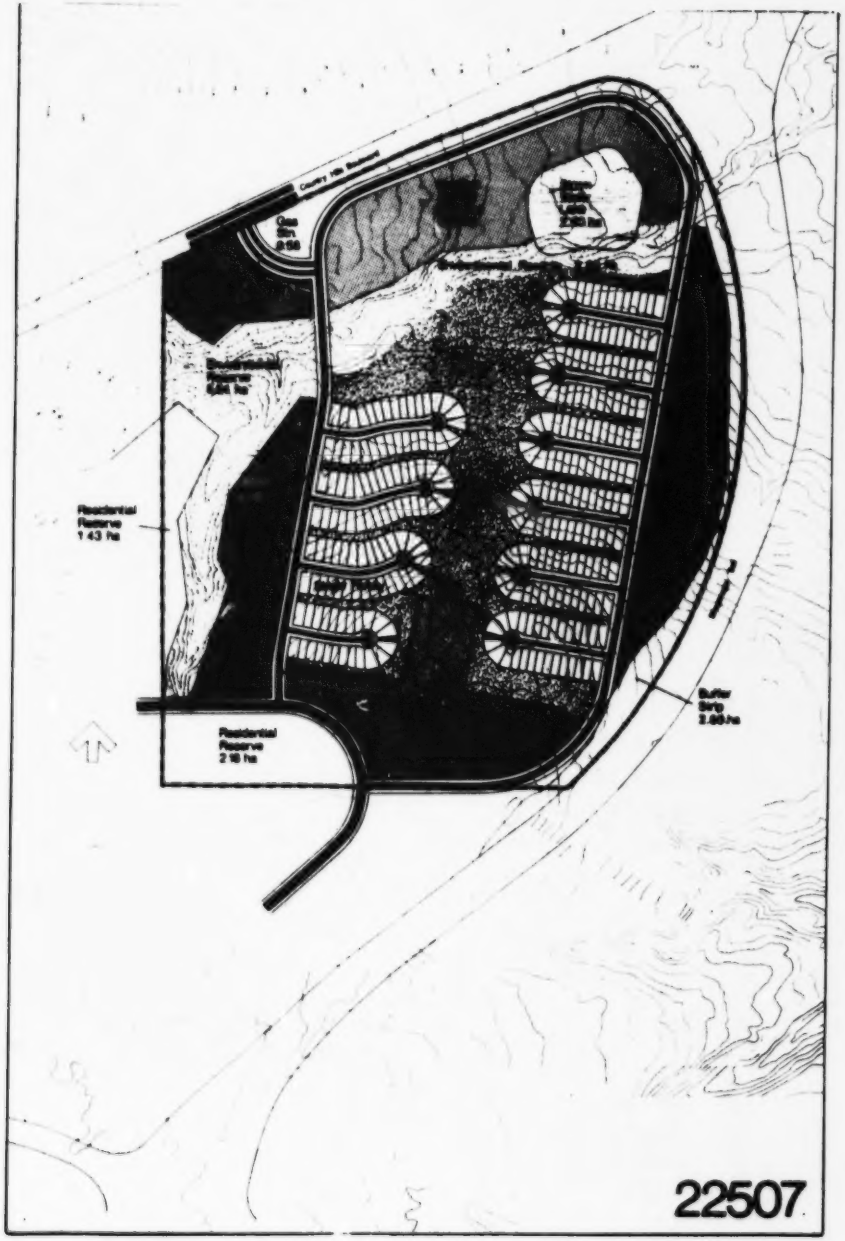

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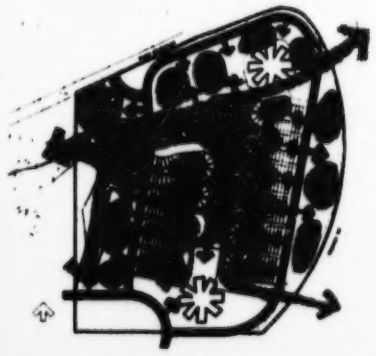
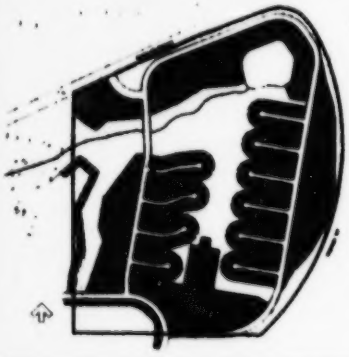
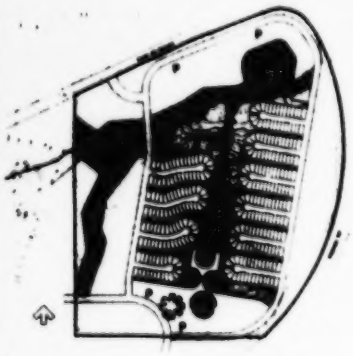


OVERALL CONCEPT



HOUSING TYPES



CENTRAL FACILITIES

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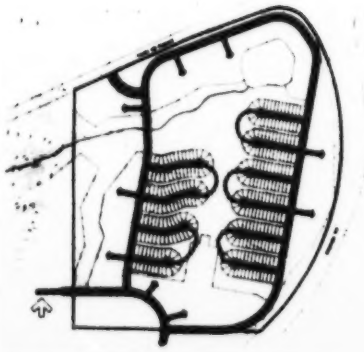
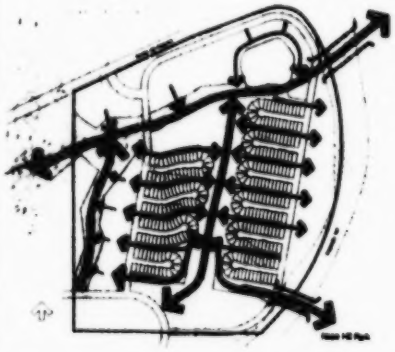
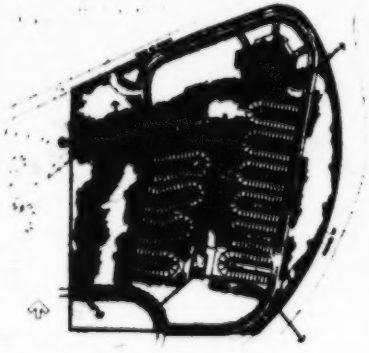


VEHICULAR SYSTEM



PEDESTRIAN SYSTEM



LANDSCAPE PLAN

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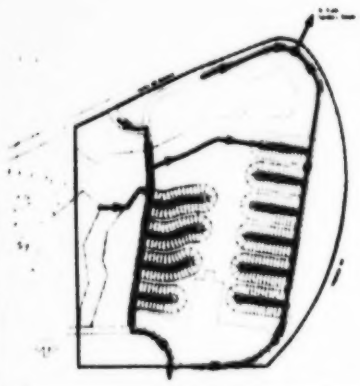
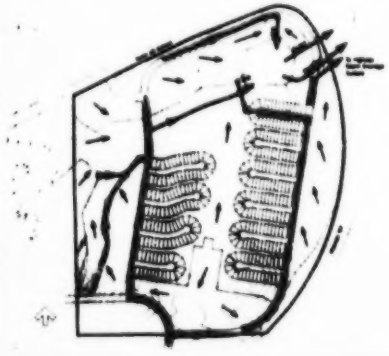
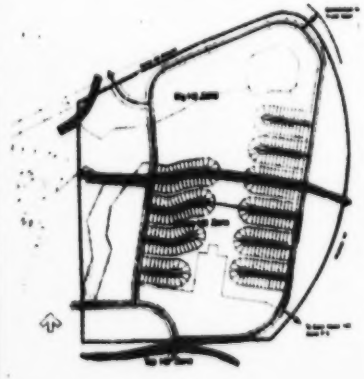


SANITARY SYSTEM



STORM DRAINAGE



WATER SUPPLY

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CATALOGUE OF SUBMISSION IDEAS

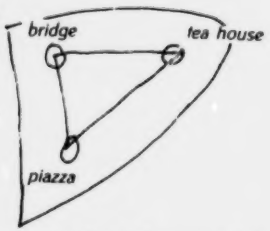
After reviewing all 54 submissions for the preparation of this report, it was found that there were some interesting thoughts in otherwise mediocre proposals. Some were too good to let go, so what follows is a catalogue of innovative ideas that can be used for inspiration, development, entertainment maybe, and also as a form of notebook to which one might add even more ideas.

The selection for this catalogue was highly subjective. The sources for the drawings used to illustrate each idea were found in the original submissions and are acknowledged as such. However, there is no copyright on ideas, and often several entrants arrived at the same concept via different routes.

COMMUNITY AND IDENTITY

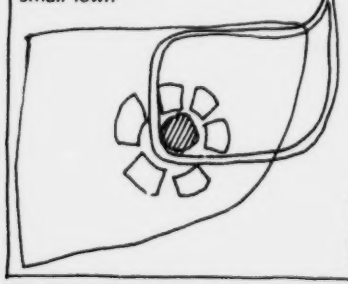
Much depends on the users, community, for the success of any scheme. Attempts to involve the community are probably wise, although possibly unwieldy. On the other hand perceived community/identity can be a physical thing.

•Sturgess



urban reference points: identity points are held in balance by their relationship to each other

commercial transit loop is an attractive focal point and could have the identity of a small town



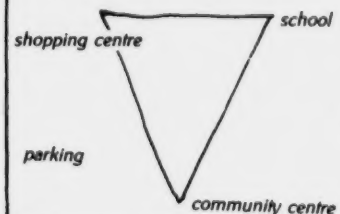
•McKenzie

identity of place: formal urban park as a balance to natural surroundings

•Sturgess

to protect the community from the ravages of the car: a Japanese shoes-off-at-the-doorway idea. collected parking & weatherproof connectors

•Chung

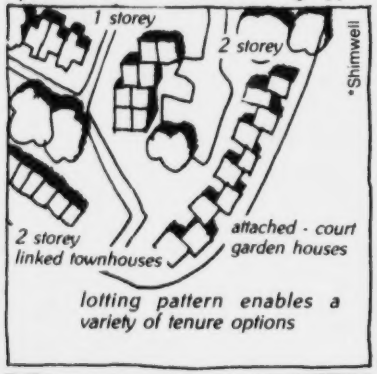


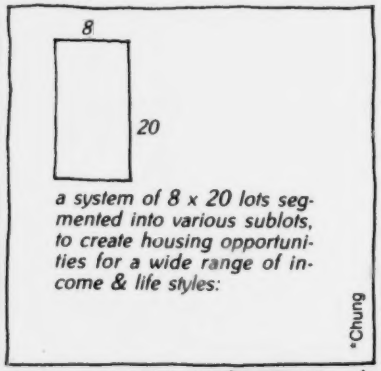
a suburban residential community ought to have the facilities and amenities an older town or neighbourhood enjoys: stores, flower shop, T.V. repair & bakery scattered throughout the community

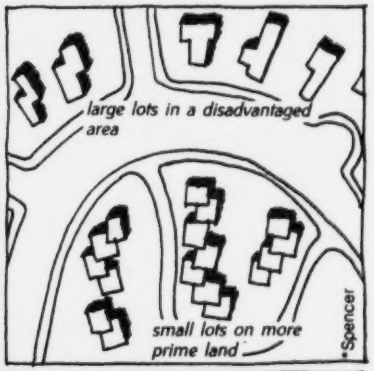
•Long

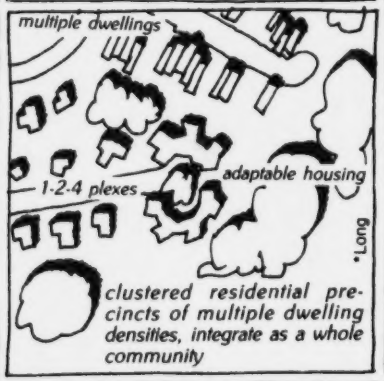
DENSITY MIX THROUGHOUT SITE

Attitudes toward density mix often fall into 2 camps: either precincts of one housing type promote identity and homogeneity, or else hetergenous developments ensure a socio-economic mix and therefore achieve a richer environment. The mix is often difficult to do gracefully — precincts are much easier.



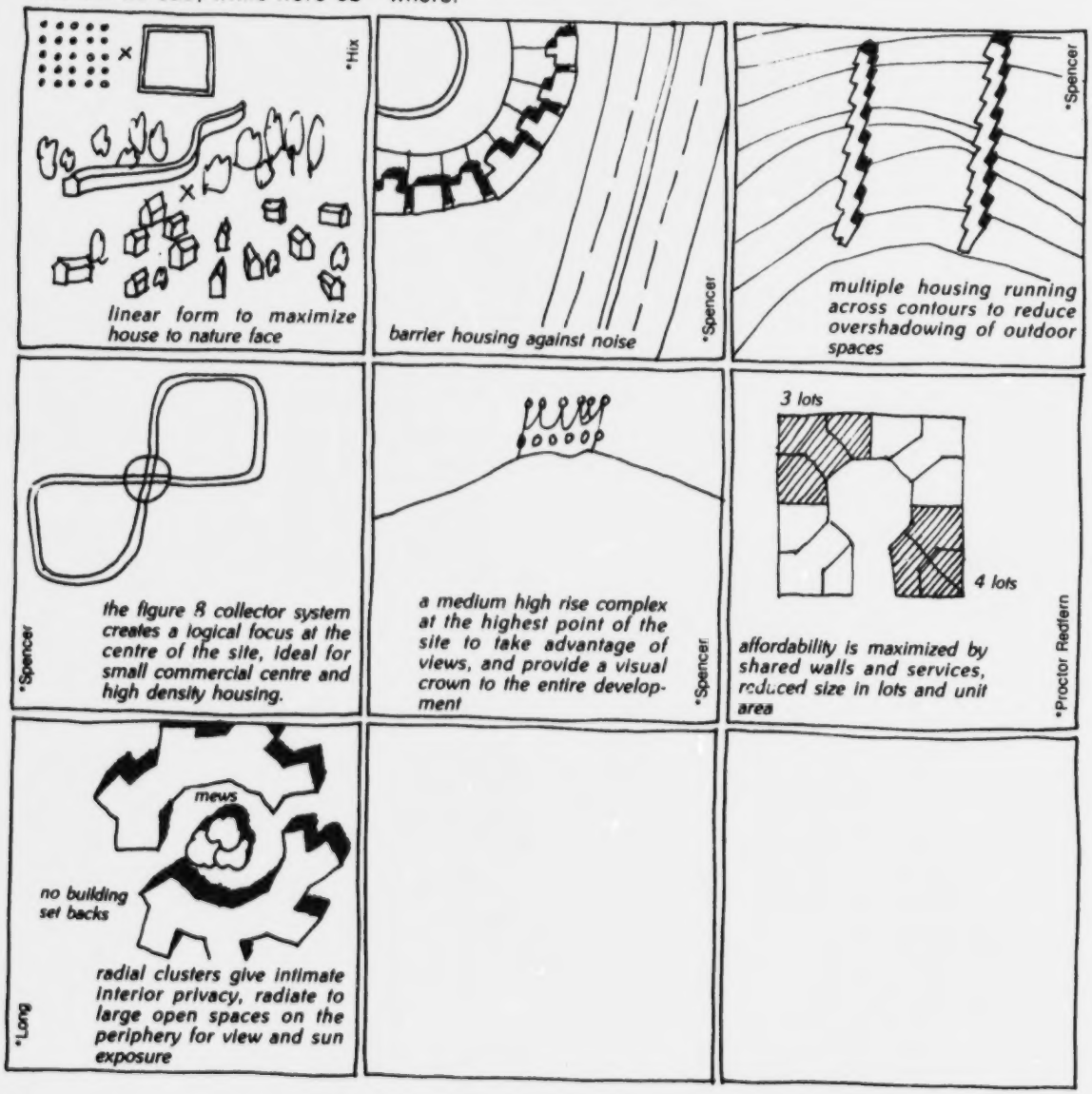






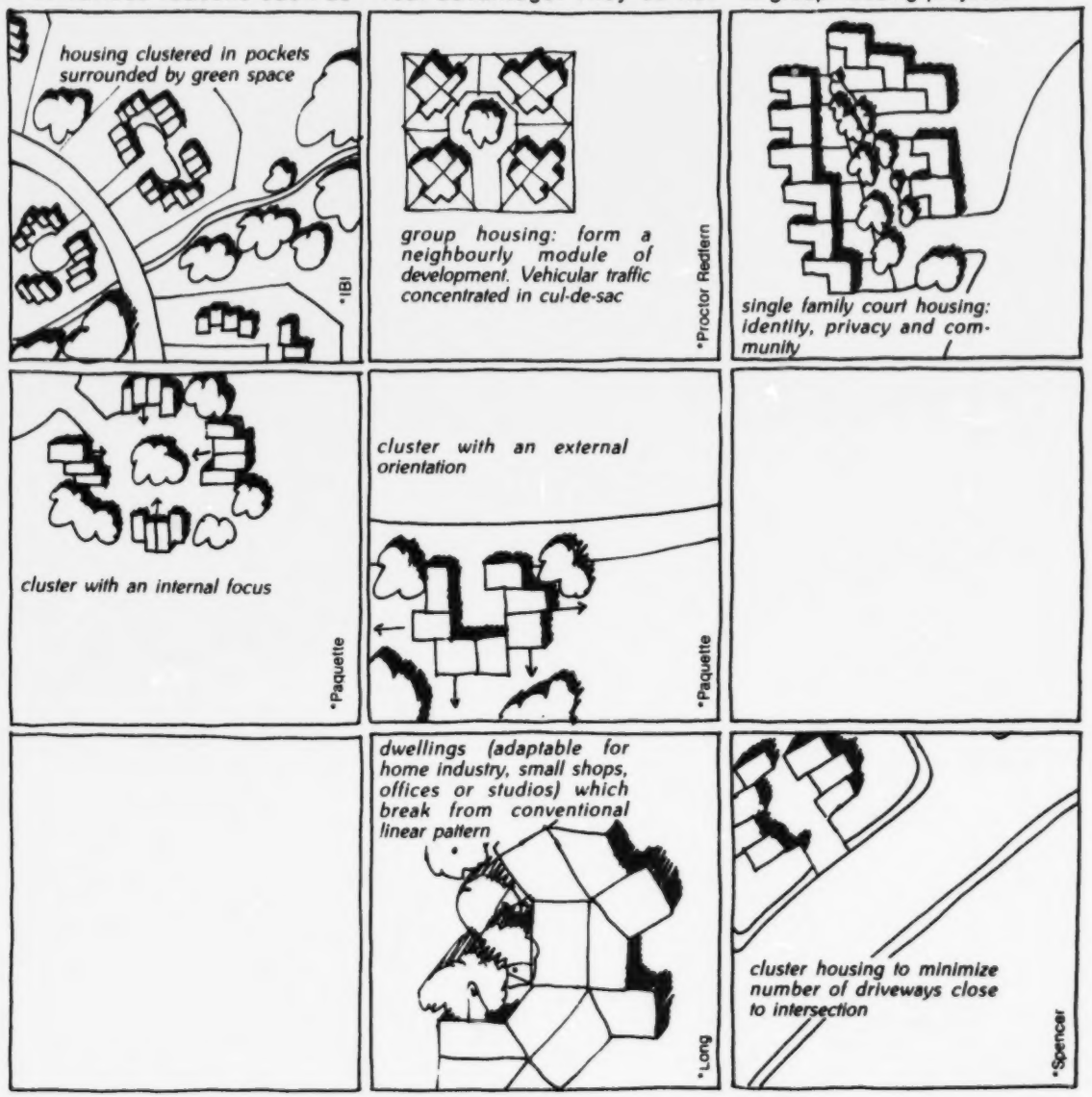
SITE TEXTURE

The balance between open space and built space, road organization: the grid, the loop, the cul-de-sac, while here obviously site specific, illustrates principles applicable to anywhere.



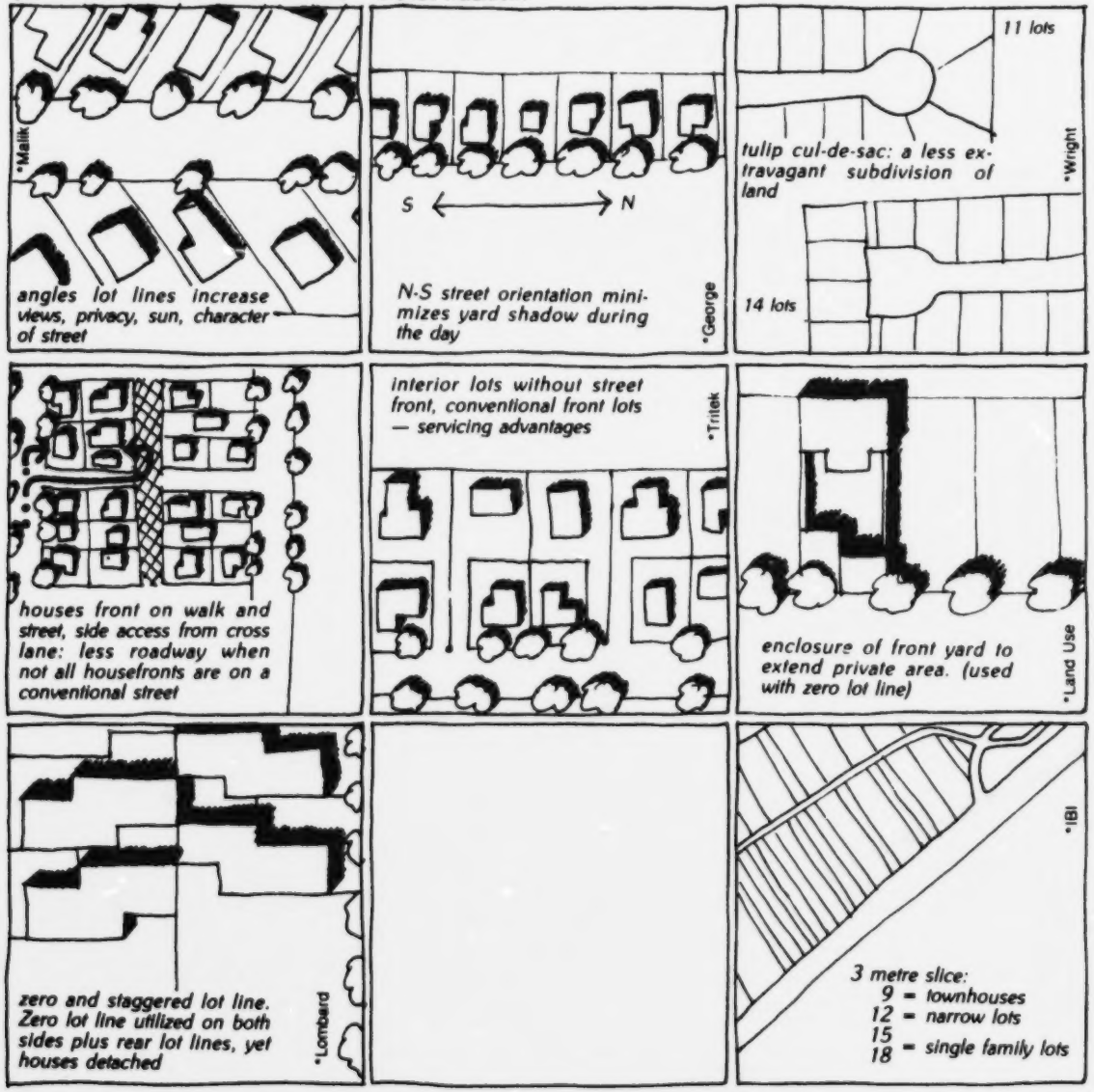
CLUSTERING

For various reasons such as minimal roadways, ganged parking and group identity, tight house groupings have real advantage. They do not exist in conventional subdivision layouts with rectangular lots and at this time usually occur in group housing projects.



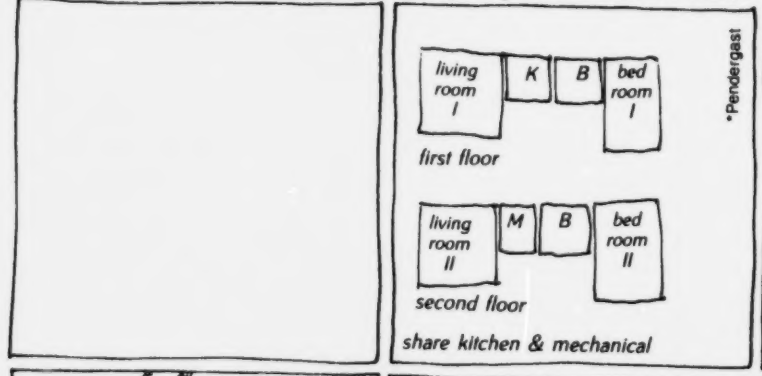
CONVENTIONAL LOTS

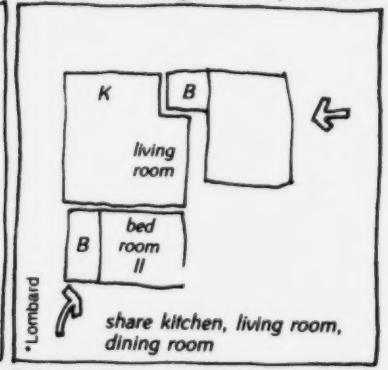
Injecting changes into the existing set of rules such as existing conventional lot sizes is an easily implemented innovation. Sometimes it requires a waiving of by-law setbacks, lot coverage, sometimes a re-think in attitude to the house-on-the-lot tradition.

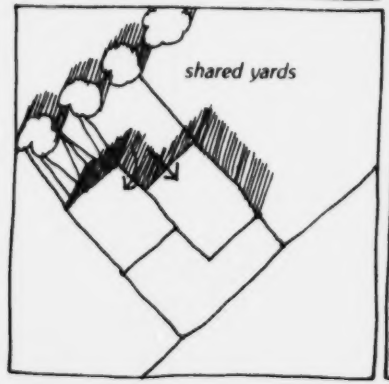


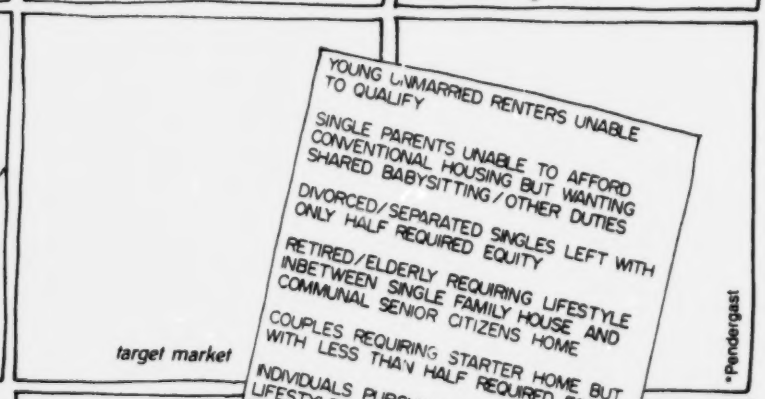
SHARED ACCOMMODATION

Sharing accommodation is an attempt to minimize duplication of services such as kitchen appliances, laundry and furnaces - an attempt to live communally but independently. This varies from minimal sharing to sharing everything but the bedroom and bath. This implies a social revolution of sorts - one in which possessiveness is not as dominant a feature of living as co-operation.



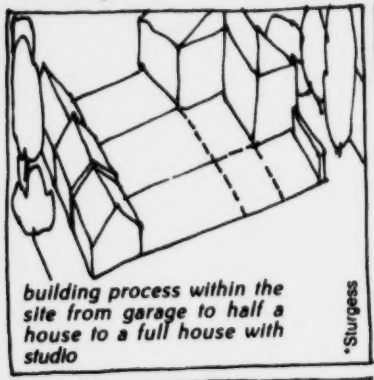






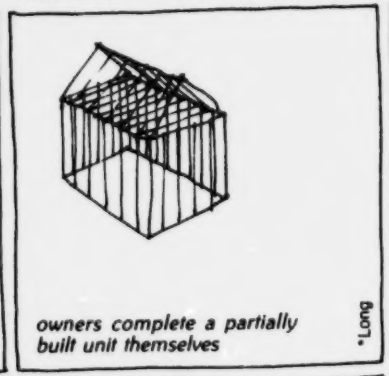
MUTABILITY

Initial outlay of mortgage money to cover a fully developed house is beyond many people who only need minimal accommodation to start. As well, the upheaval of leaving a full size family house after the family has left is often overly traumatic. The mutable house responds to changing family needs and economic abilities.



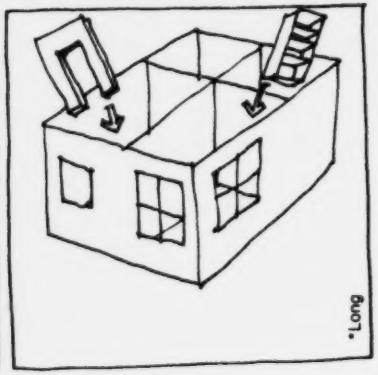
building process within the site from garage to half a house to a full house with studio

•Sturgess

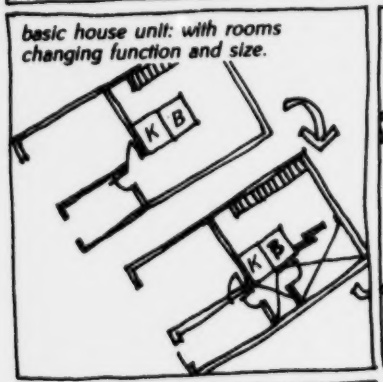


owners complete a partially built unit themselves

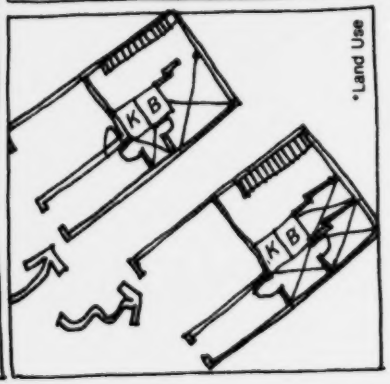
•Long



•Long



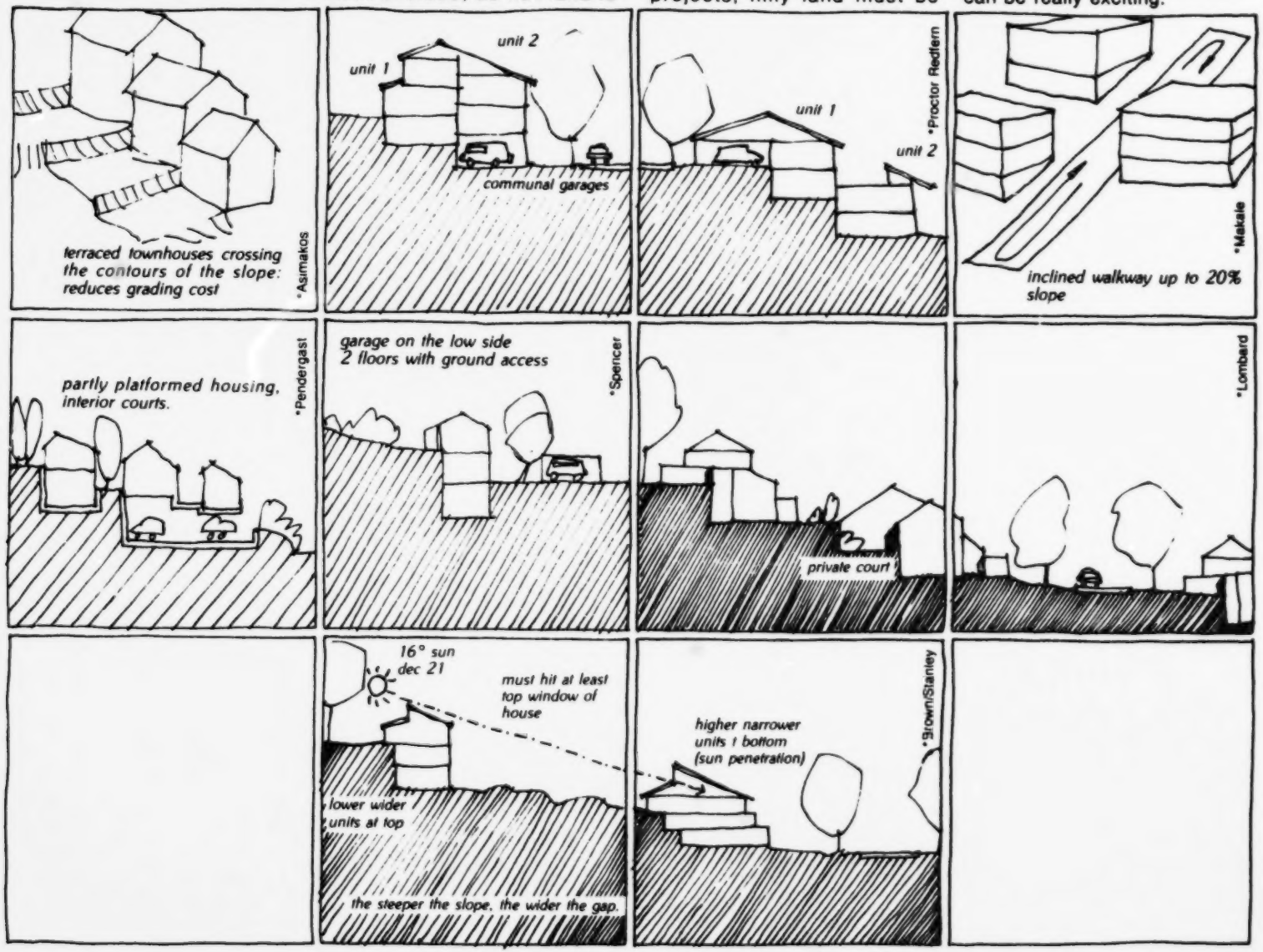
basic house unit: with rooms changing function and size.



•Land Use

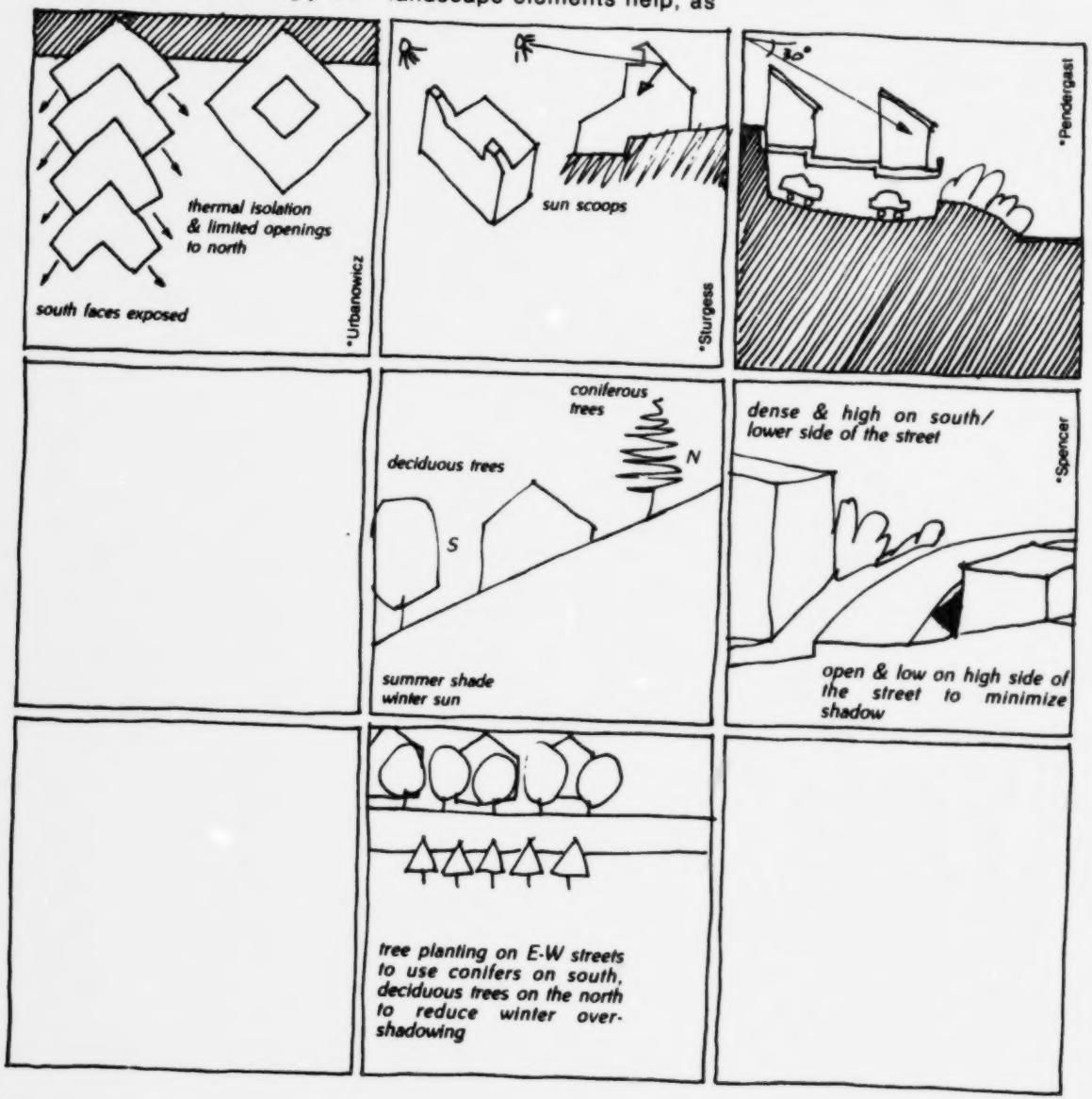
STEEP TERRAIN

Housing on slopes has often been avoided, as flat land is so much more easily developed. However with aesthetic disapproval of vast land flattening projects, hilly land must be dealt with, both because flat land is limited and the visual opportunities of sloped sites can be really exciting.



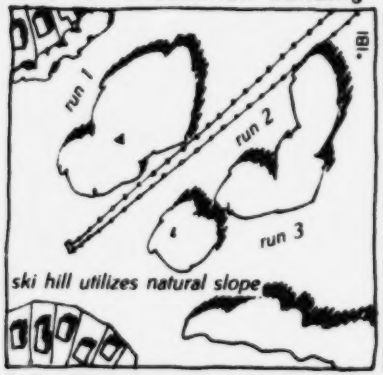
ENERGY CONCERNS THROUGH SITING

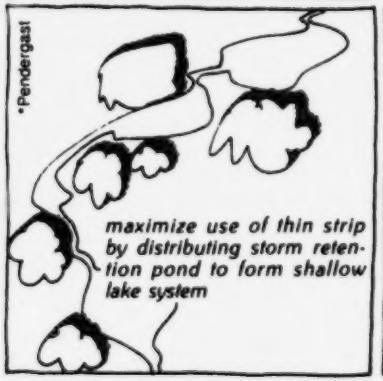
House configuration and subdivision layout can both take advantage of inherent natural energy even in seemingly disadvantaged sites such as a steep north facing slope. Wind breaks of both buildings and landscape elements help, as does road orientation.

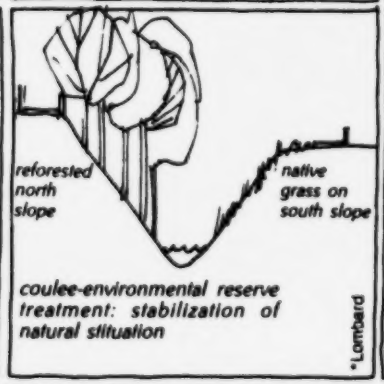


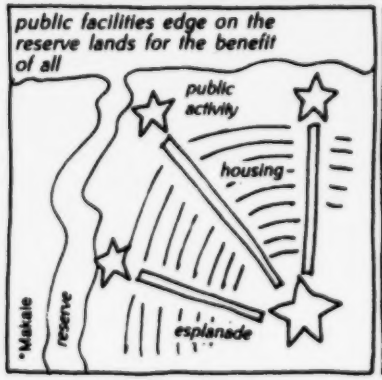
ENVIRONMENTAL RESERVES AND OPEN AMENITY SPACE

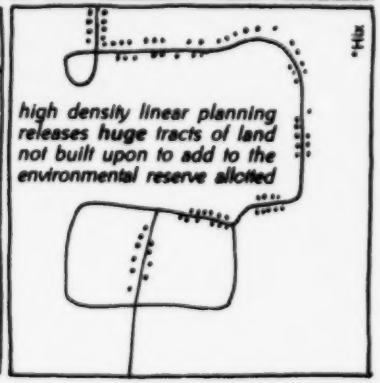
Almost every virgin site contains significant land features. These are often eradicated to simplify planning and building, but if retained, become the basis for parkland within the community or else become the site for uncommon building forms. Active involvement with the open space often leads to recreation development, while passive involvement traditionally tends to line up low density development along the edges. These need not be the only solutions.





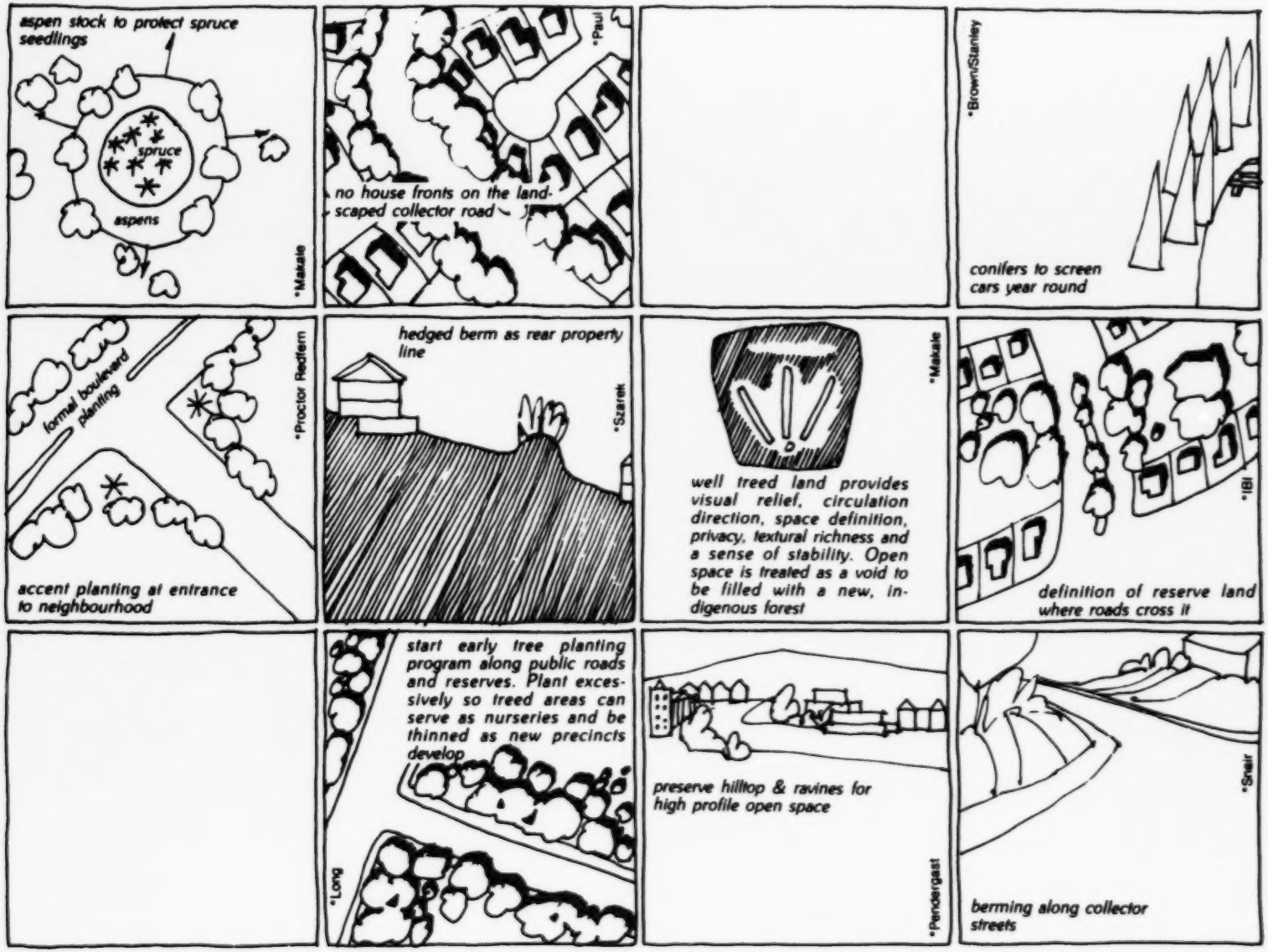




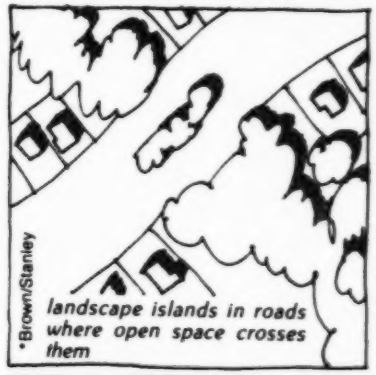


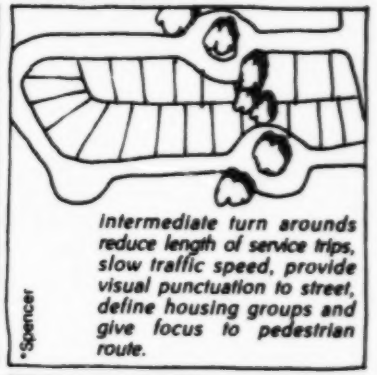
LANDSCAPING

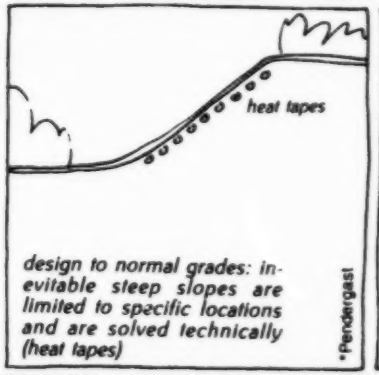
It is generally acknowledged that landscape is more than plant decoration. It s screening of noise, wind and unpleasant views is as important as its ability to define and delineate paths, reserves and natural site features.

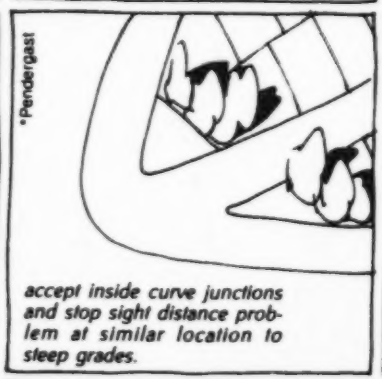


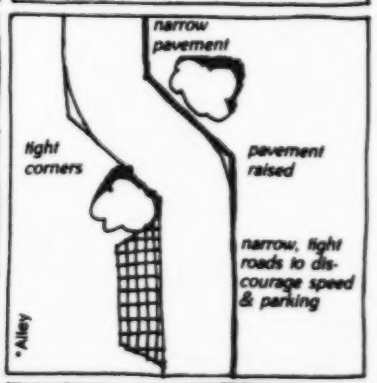
Roads and parking, collectors and laneways, access and landscaping – all these things are part of the road situation. This is complicated by steep slopes of course, but the problems remain: noise, space consumption, visual disharmony, and dangerous speeds for playing children.

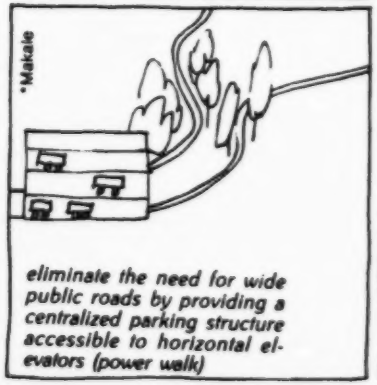


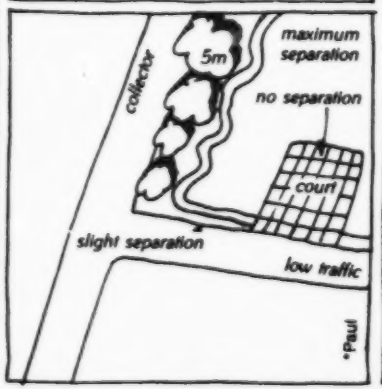






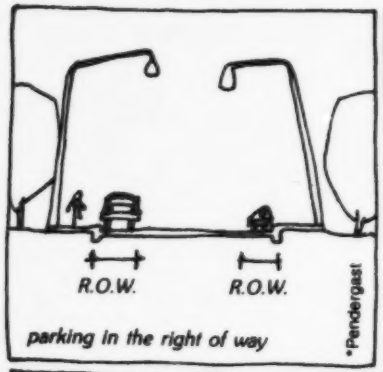




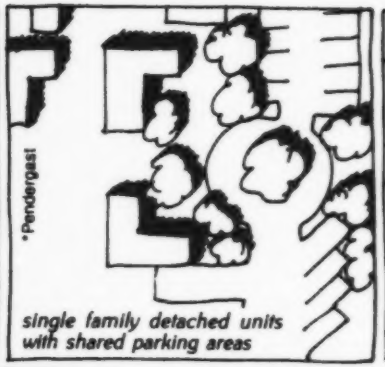


PARKING

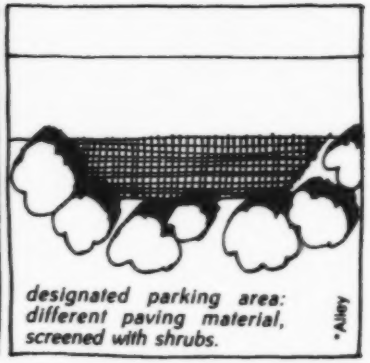
The eternal problem.



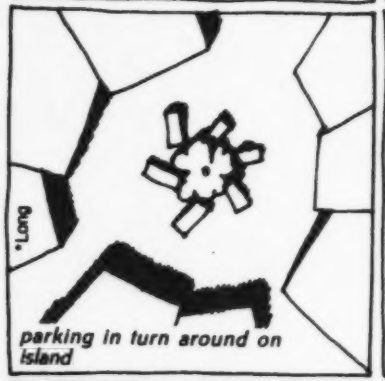
parking in the right of way



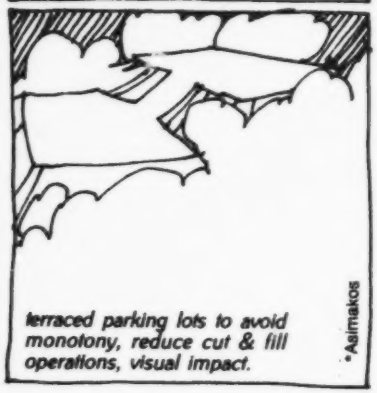
single family detached units with shared parking areas



designated parking area: different paving material, screened with shrubs.



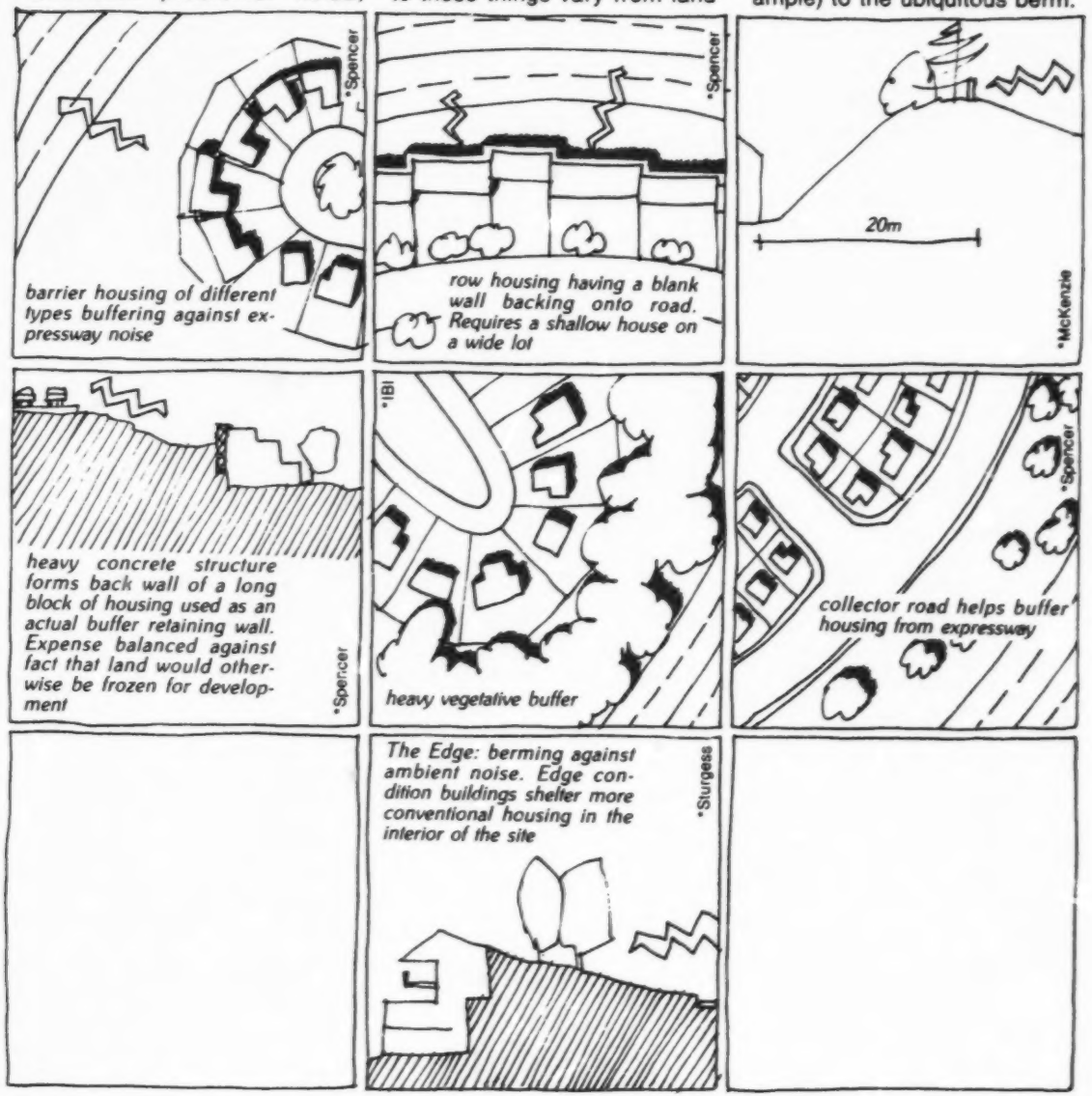
parking in turn around on island



terraced parking lots to avoid monotony, reduce cut & fill operations, visual impact.

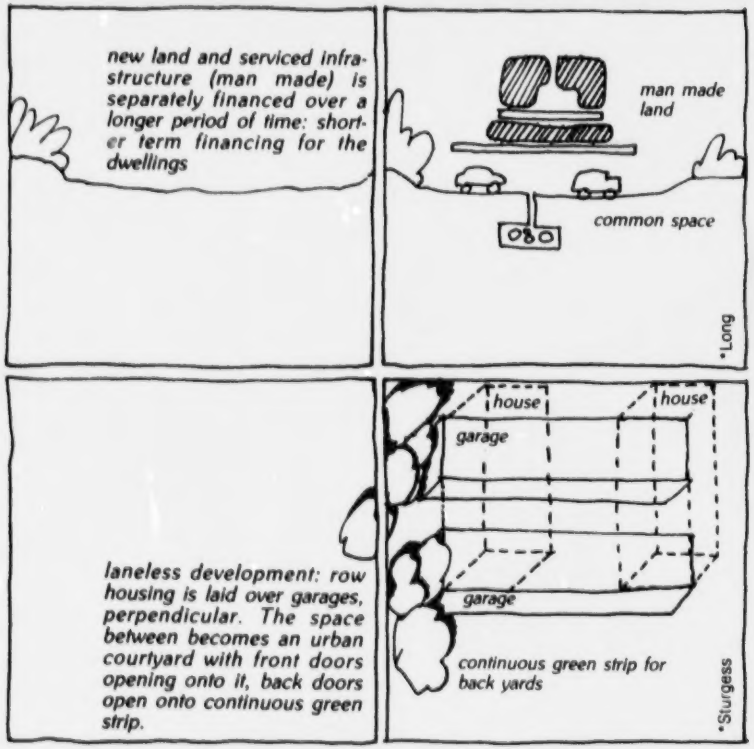
NOISE FROM FREEWAYS

The hierarchy of lanes, collectors and freways means that almost every major new housing district has an edge of freeway or expressway, with all the attendant problems: noise, dirt, visual unpleasantness, over-bright night lighting, and lack of privacy. The solutions to these things vary from landscape treatment to built form (the Byker Wall in Newcastle by Erskine being a famous example) to the ubiquitous berm.



PLATFORM HOUSING

Platform housing, although not a new concept, seems to have difficulty in being implemented in a non-rental situation. Ownership of a house without land is a financial possibility as markets, incomes and developable land continue to contract.



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POOR

QUALITY

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